

See 161778  
Text 161779

Schreiber, David

From: Foley, Shanon  
Sent: Monday, August 01, 2005 8:02 AM  
To: Schreiber, David  
Subject: FW: 09810501 genank and cas nos

Here's the search request again. Please include the text search described below. Thank you David!  
Shanon

-----Original Message-----

From: Foley, Shanon  
Sent: Tuesday, July 26, 2005 8:37 AM  
To: Schreiber, David  
Subject: RE: 09810501

The only submission numbers I can find for porcine reproductive and respiratory syndrome virus (PRRSV) strain VR 2385 are:  
GENBANK U03040  
CAS RN: 151609-21-1

I am looking for any sequence that is 10-50 nt in length that would hybridize to this PRRSV strain (see claim 30 please). I'm looking for 2 primers. A text search might also be useful.

There are a ton of synonyms for the name of this virus, but the most common are: mystery swine disease, blue-eared syndrome, swine infertility and respiratory syndrome, porcine epidemic abortion and respiratory syndrome, blue ear disease, blue abortion disease, Wabash syndrome, mystery pig disease and swine plague. It's also known as a Lelystad virus, but I am not interested in anything associated with this name because I am only interested in North American isolates. Hits would comprise any of these names (except for Lelystad) and a primer associated with VR 2385 (or its Genbank or CAS RN nos.)

s/e 75%

Thank you David.  
Shanon

-----Original Message-----

From: Schreiber, David  
Sent: Tuesday, July 26, 2005 6:31 AM  
To: Foley, Shanon  
Subject: RE: 09810501

Shanon,

I'm working on 066 as we speak. I'm doing the score over length part for question 2. About the accession number search, I was asked by Arti to hold back these searches because some people upstairs are of the belief that some examiners are using this to get around the CRF rules. I should know their conclusion soon and will set it up then. Hope this isn't a big inconvenience.

David Schreiber, Ph.D.  
Scientific and Technical Information Center  
Biotech/Chem Library  
Remsen E01A61  
571-272-2526

u 03040.see  
01

-----Original Message-----

From: Foley, Shanon  
Sent: Monday, July 25, 2005 12:30 PM  
To: Schreiber, David  
Subject: 09810501

Hi David. I have 2 quick questions for you. I was wondering if it would be possible to do a fragment search for a sequence I have Genbank accession numbers to. Also, I was wondering if the search for 09/769066 is going to be ready soon (I hate to ask, but I need the count).

Thank you.  
Shanon Foley

1

STAFF USE ONLY

Searcher: D. Schreiber Type of Search 11 NA Sequence (#)  
Searcher Phone #: 272-2526 AA Sequence (#)  
Searcher Location: Remsen E01A62 Structure (#)  
Date Searcher Picked Up: ✓ Bibliographic  
Date Completed: 8/8 Litigation  
Searcher Prep & Review Time: 5:41 Fulltext  
Online Time: 64/25 Other

Vendors and cost where applicable

✓ STN 7744 Dialog  
\_\_\_\_ Questel/Orbit \_\_\_\_ Lexis/Nexis  
\_\_\_\_ Westlaw \_\_\_\_ WWW/Internet  
\_\_\_\_ In-house sequence systems  
\_\_\_\_ Commercial \_\_\_\_ Oligomer \_\_\_\_ Score/Length  
\_\_\_\_ Interference \_\_\_\_ SPDI \_\_\_\_ Encode/Transl  
\_\_\_\_ Other (specify)

[illegible]

GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: August 8, 2005, 10:44:39 ; Search time 10 Seconds  
(without alignments)  
3.640 Million cell updates/sec

Title: u03040  
Perfect score: 2050  
Sequence: 1 GGCAGCTTGTGTCCTCC.....GAACACACGCCGAATTA 2050

Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 0.5

Searched: 481 segs, 8878 residues

Total number of hits satisfying chosen parameters: 962

Minimum DB seq length: 10  
Maximum DB seq length: 50

Post-Processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 484 summaries

Database : rge03040.seq.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
C 1	39.2	1.9	44	1	AX316131
C 2	30	1.5	38	1	AR146991
C 3	29.8	1.5	33	1	AR146987
C 4	29	1.4	37	1	AR146986
C 5	26	1.3	34	1	AR146993
C 6	25.6	1.2	32	1	A68954
C 7	25.6	1.2	32	1	AR139180
C 8	25.6	1.2	32	1	AR342364
C 9	25.6	1.2	32	1	BD006067
C 10	25	1.2	33	1	AR146992
C 11	23.6	1.2	30	1	AR146989
C 12	23.6	1.2	30	1	BD137734
C 13	22.8	1.1	26	1	E49336
C 14	22.8	1.1	26	1	AR269194
C 15	22.8	1.1	26	1	BD015919
C 16	22.8	1.1	26	1	BD016287
C 17	22.6	1.1	30	1	A83346
C 18	22.6	1.1	30	1	AR266536
C 19	22	1.1	22	1	AR107513
C 20	22	1.1	22	1	AR107514
C 21	22	1.1	22	1	AR158131
C 22	22	1.1	22	1	AR158132
C 23	22	1.1	22	1	AR158133
C 24	22	1.1	22	1	AR158134
C 25	22	1.1	22	1	BD137790
C 26	22	1.1	22	1	BD137791
C 27	22	1.1	22	1	E49311
C 28	22	1.1	22	1	I84203
C 29	22	1.1	22	1	I84204
C 30	22	1.1	22	1	AR269169
C 31	22	1.1	22	1	AR353117
C 32	22	1.1	22	1	AR353118
C 33	22	1.1	22	1	BD015894
C 34	22	1.1	22	1	BD016262
C 35	21	1.0	21	1	AR238012
C 36	21	1.0	21	1	AR353110
C 37	20	1.0	20	1	AR107515
C 38	20	1.0	20	1	AR107516
C 39	20	1.0	20	1	AR107517
C 40	20	1.0	20	1	AR107518
C 41	20	1.0	20	1	AR107519
C 42	20	1.0	20	1	AR158127
C 43	20	1.0	20	1	AR158128
C 44	20	1.0	20	1	AR158129
C 45	20	1.0	20	1	AR158134
C 46	20	1.0	20	1	AR158315
C 47	20	1.0	20	1	AR158316
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C 49	20	1.0	20	1	AR158318
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C 52	20	1.0	20	1	BD137787
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C 63	20	1.0	20	1	AR353122
C 64	20	1.0	20	1	AR353123
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C 79	18	0.9	18	1	BD137784
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C 81	18	0.9	18	1	BD137789
C 82	18	0.9	18	1	BD137797
C 83	18	0.9	18	1	BD137802
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C 91	17.2	0.8	22	1	BD137730
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C 95	17	0.8	17	1	AR158116
C 96	17	0.8	17	1	BD137775
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C 98	17	0.8	17	1	AX579597
C 99	16.8	0.8	22	1	CQ827040
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C 101	16.8	0.8	22	1	AB068769
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C 105	16.2	0.8	21	1	AR106015
C 106	16.2	0.8	21	1	AR153356

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C 254	13.6	0.7	44	1	AX316131	ACCESSION:AX316131	327	13	0.6	17	1	AR327091	ACCESSION:AR327091
C 255	13.4	0.7	15	1	AR080236	ACCESSION:AR080236	328	13	0.6	17	1	AR329302	ACCESSION:AR329302
C 256	13.4	0.7	15	1	BD233331	ACCESSION:BD233331	329	13	0.6	17	1	AR329303	ACCESSION:AR329303
C 257	13.4	0.7	15	1	I77359	ACCESSION:I77359	330	13	0.6	17	1	AR329304	ACCESSION:AR329304
C 258	13.4	0.7	15	1	AR285756	ACCESSION:AR285756	331	13	0.6	17	1	AR398295	ACCESSION:AR398295
C 259	13.4	0.7	15	1	AR397747	ACCESSION:AR397747	332	13	0.6	17	1	AR433898	ACCESSION:AR433898
C 260	13.4	0.7	15	1	AR007885	ACCESSION:AR007885	333	13	0.6	17	1	AR433899	ACCESSION:AR433899
C 261	13.4	0.7	15	1	AG38058	ACCESSION:AG38058	334	13	0.6	17	1	AR455374	ACCESSION:AR455374
C 262	13.4	0.7	15	1	BD023158	ACCESSION:BD023158	335	13	0.6	17	1	AX422308	ACCESSION:AX422308
C 263	13.4	0.7	16	1	CQ858579	ACCESSION:CQ858579	C 336	13	0.6	17	1	AX579598	ACCESSION:AX579598
C 264	13.4	0.7	17	1	BD200794	ACCESSION:BD200794	C 337	13	0.6	17	1	AX725032	ACCESSION:AX725032
C 265	13.4	0.7	17	1	BD203285	ACCESSION:BD203285	C 338	13	0.6	17	1	AX727074	ACCESSION:AX727074
C 266	13.4	0.7	17	1	BD203286	ACCESSION:BD203286	339	13	0.6	17	1	AX734947	ACCESSION:AX734947
C 267	13.4	0.7	17	1	BD233332	ACCESSION:BD233332	340	13	0.6	17	1	AX761979	ACCESSION:AX761979
C 268	13.4	0.7	17	1	BD254884	ACCESSION:BD254884	341	13	0.6	38	1	AX146991	ACCESSION:AX146991
C 269	13.4	0.7	17	1	CQ625359	ACCESSION:CQ625359	C 342	12.8	0.6	16	1	A65734	ACCESSION:A65734
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C 271	13.4	0.7	17	1	CQ625361	ACCESSION:CQ625361	C 344	12.8	0.6	16	1	AR098673	ACCESSION:AR098673
C 272	13.4	0.7	17	1	AR186596	ACCESSION:AR186596	C 345	12.8	0.6	16	1	AR098717	ACCESSION:AR098717
C 273	13.4	0.7	17	1	AR323227	ACCESSION:AR323227	346	12.8	0.6	16	1	AR098718	ACCESSION:AR098718
C 274	13.4	0.7	17	1	AR326794	ACCESSION:AR326794	C 347	12.8	0.6	16	1	AR098724	ACCESSION:AR098724
C 275	13.4	0.7	17	1	AR402135	ACCESSION:AR402135	348	12.8	0.6	16	1	AR105172	ACCESSION:AR105172
C 276	13.4	0.7	17	1	AR433895	ACCESSION:AR433895	349	12.8	0.6	16	1	AR178422	ACCESSION:AR178422
C 277	13.4	0.7	17	1	AR433896	ACCESSION:AR433896	C 350	12.8	0.6	16	1	AR204747	ACCESSION:AR204747
C 278	13.4	0.7	17	1	AR433897	ACCESSION:AR433897	C 351	12.8	0.6	16	1	AR233443	ACCESSION:AR233443
C 279	13.4	0.7	17	1	AR466422	ACCESSION:AR466422	352	12.8	0.6	16	1	AR435926	ACCESSION:AR435926
C 280	13.4	0.7	17	1	AR466423	ACCESSION:AR466423	C 353	12.8	0.6	16	1	AX328331	ACCESSION:AX328331
C 281	13.4	0.7	17	1	AR466424	ACCESSION:AR466424	354	12.8	0.6	17	1	AS2143	ACCESSION:AS2143
C 282	13.4	0.7	17	1	AX007886	ACCESSION:AX007886	355	12.8	0.6	17	1	AR021241	ACCESSION:AR021241
C 283	13.4	0.7	17	1	AX214784	ACCESSION:AX214784	C 356	12.8	0.6	17	1	AR023917	ACCESSION:AR023917
C 284	13.4	0.7	17	1	AX214785	ACCESSION:AX214785	357	12.8	0.6	17	1	AR034105	ACCESSION:AR034105
C 285	13.4	0.7	17	1	AX215129	ACCESSION:AX215129	C 358	12.8	0.6	17	1	AR040983	ACCESSION:AR040983
C 286	13.4	0.7	17	1	AX215657	ACCESSION:AX215657	C 359	12.8	0.6	17	1	AR046814	ACCESSION:AR046814
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C 288	13.4	0.7	17	1	AX216002	ACCESSION:AX216002	C 361	12.8	0.6	17	1	AR084693	ACCESSION:AR084693
C 289	13.4	0.7	17	1	AX216109	ACCESSION:AX216109	362	12.8	0.6	17	1	AR093906	ACCESSION:AR093906
C 290	13.4	0.7	17	1	AX227392	ACCESSION:AX227392	C 363	12.8	0.6	17	1	BD197622	ACCESSION:BD197622
C 291	13.4	0.7	17	1	AX227625	ACCESSION:AX227625	364	12.8	0.6	17	1	BD198706	ACCESSION:BD198706
C 292	13.4	0.7	17	1	AX422870	ACCESSION:AX422870	C 365	12.8	0.6	17	1	BD201420	ACCESSION:BD201420
C 293	13.4	0.7	17	1	AX422871	ACCESSION:AX422871	C 366	12.8	0.6	17	1	BD202792	ACCESSION:BD202792
C 294	13.4	0.7	17	1	AX530808	ACCESSION:AX530808	C 367	12.8	0.6	17	1	BD241305	ACCESSION:BD241305
C 295	13.4	0.7	17	1	AX530809	ACCESSION:AX530809	368	12.8	0.6	17	1	BD254127	ACCESSION:BD254127
C 296	13.4	0.7	17	1	AX530810	ACCESSION:AX530810	369	12.8	0.6	17	1	BD254128	ACCESSION:BD254128
C 297	13.4	0.7	17	1	AX673031	ACCESSION:AX673031	C 370	12.8	0.6	17	1	BD254222	ACCESSION:BD254222
C 298	13.4	0.7	17	1	AX723047	ACCESSION:AX723047	C 371	12.8	0.6	17	1	BD254223	ACCESSION:BD254223
C 299	13.4	0.7	17	1	AX724045	ACCESSION:AX724045	C 372	12.8	0.6	17	1	BD254566	ACCESSION:BD254566
C 300	13.4	0.7	17	1	AX724466	ACCESSION:AX724466	C 373	12.8	0.6	17	1	BD255076	ACCESSION:BD255076
C 301	13.4	0.7	17	1	AX725749	ACCESSION:AX725749	374	12.8	0.6	17	1	BD255223	ACCESSION:BD255223
C 302	13.4	0.7	17	1	AX735711	ACCESSION:AX735711	375	12.8	0.6	17	1	BD255548	ACCESSION:BD255548
C 303	13.4	0.7	17	1	AX735798	ACCESSION:AX735798	C 376	12.8	0.6	17	1	BD259576	ACCESSION:BD259576
C 304	13.4	0.7	17	1	AX737424	ACCESSION:AX737424	C 377	12.8	0.6	17	1	CO622920	ACCESSION:CO622920
C 305	13.4	0.7	17	1	AX783190	ACCESSION:AX783190	378	12.8	0.6	17	1	CO622921	ACCESSION:CO622921
C 306	13.4	0.7	17	1	BD067635	ACCESSION:BD067635	379	12.8	0.6	17	1	CO623253	ACCESSION:CO623253
C 307	13.4	0.7	33	1	AR146987	ACCESSION:AR146987	380	12.8	0.6	17	1	CO623254	ACCESSION:CO623254
C 308	13	0.6	16	1	AR173659	ACCESSION:AR173659	381	12.8	0.6	17	1	CO624816	ACCESSION:CO624816
C 309	13	0.6	16	1	AX128606	ACCESSION:AX128606	382	12.8	0.6	17	1	CO624817	ACCESSION:CO624817
C 310	13	0.6	16	1	AX255819	ACCESSION:AX255819	383	12.8	0.6	17	1	CO625604	ACCESSION:CO625604
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C 312	13	0.6	17	1	BD258415	ACCESSION:BD258415	C 385	12.8	0.6	17	1	IS3866	ACCESSION:IS3866
C 313	13	0.6	17	1	AR186104	ACCESSION:AR186104	386	12.8	0.6	17	1	AR190268	ACCESSION:AR190268
C 314	13	0.6	17	1	AR188699	ACCESSION:AR188699	387	12.8	0.6	17	1	AR325233	ACCESSION:AR325233
C 315	13	0.6	17	1	AR188700	ACCESSION:AR188700	C 388	12.8	0.6	17	1	AR327469	ACCESSION:AR327469
C 316	13	0.6	17	1	AR190496	ACCESSION:AR190496	C 389	12.8	0.6	17	1	AR327470	ACCESSION:AR327470
C 317	13	0.6	17	1	AR190497	ACCESSION:AR190497	390	12.8	0.6	17	1	AR370432	ACCESSION:AR370432
C 318	13	0.6	17	1	AR286305	ACCESSION:AR286305	C 391	12.8	0.6	17	1	AR401775	ACCESSION:AR401775
C 319	13	0.6	17	1	AR305556	ACCESSION:AR305556	392	12.8	0.6	17	1	AR402355	ACCESSION:AR402355
C 320	13	0.6	17	1	AR322735	ACCESSION:AR322735	C 393	12.8	0.6	17	1	AR407874	ACCESSION:AR407874
C 321	13	0.6	17	1	AR324552	ACCESSION:AR324552	C 394	12.8	0.6	17	1	AR434329	ACCESSION:AR434329
C 322	13	0.6	17	1	AR324553	ACCESSION:AR324553	C 395	12.8	0.6	17	1	AR434330	ACCESSION:AR434330
C 323	13	0.6	17	1	AR325419	ACCESSION:AR325419	396	12.8	0.6	17	1	AR463983	ACCESSION:AR463983
C 324	13	0.6	17	1	AR325420	ACCESSION:AR325420	397	12.8	0.6	17	1	AR463984	ACCESSION:AR463984
C 325	13	0.6	17	1	AR326949	ACCESSION:AR326949	398	12.8	0.6	17	1	AR464316	ACCESSION:AR464316

399	12.8	0.6	17	1	AR464317	ACCESSION:AR464317	ACCESSION:AX783359
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401	12.8	0.6	17	1	AR465880	ACCESSION:AR465880	ACCESSION:AX783686
402	12.8	0.6	17	1	AR466667	ACCESSION:AR466667	ACCESSION:AX783827
403	12.8	0.6	17	1	AR466668	ACCESSION:AR466668	ACCESSION:AX783829
C 404	12.8	0.6	17	1	AR482806	ACCESSION:AR482806	ACCESSION:AX801881
C 405	12.8	0.6	17	1	AX202069	ACCESSION:AX202069	ACCESSION:BD067275
406	12.8	0.6	17	1	AX214795	ACCESSION:AX214795	ACCESSION:BD067855
407	12.8	0.6	17	1	AX215510	ACCESSION:AX215510	ACCESSION:BD097042
408	12.8	0.6	17	1	AX216556	ACCESSION:AX216556	ACCESSION:BD104893
409	12.8	0.6	17	1	AX217071	ACCESSION:AX217071	ACCESSION:BD104895
410	12.8	0.6	17	1	AX217167	ACCESSION:AX217167	ACCESSION:BD105167
411	12.8	0.6	17	1	AX227740	ACCESSION:AX227740	ACCESSION:AB068528
C 412	12.8	0.6	17	1	AX264407	ACCESSION:AX264407	
C 413	12.8	0.6	17	1	AX264408	ACCESSION:AX264408	
414	12.8	0.6	17	1	AX272999	ACCESSION:AX272999	
415	12.8	0.6	17	1	AX326497	ACCESSION:AX326497	
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C 417	12.8	0.6	17	1	AX421770	ACCESSION:AX421770	
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429	12.8	0.6	17	1	AX531533	ACCESSION:AX531533	
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432	12.8	0.6	17	1	AX579231	ACCESSION:AX579231	
C 433	12.8	0.6	17	1	AX579671	ACCESSION:AX579671	
C 434	12.8	0.6	17	1	AX579747	ACCESSION:AX579747	
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C 438	12.8	0.6	17	1	AX674627	ACCESSION:AX674627	
439	12.8	0.6	17	1	AX693277	ACCESSION:AX693277	
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C 449	12.8	0.6	17	1	AX731872	ACCESSION:AX731872	
C 450	12.8	0.6	17	1	AX732070	ACCESSION:AX732070	
C 451	12.8	0.6	17	1	AX732306	ACCESSION:AX732306	
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C 453	12.8	0.6	17	1	AX732996	ACCESSION:AX732996	
C 454	12.8	0.6	17	1	AX734777	ACCESSION:AX734777	
C 455	12.8	0.6	17	1	AX734937	ACCESSION:AX734937	
C 456	12.8	0.6	17	1	AX736973	ACCESSION:AX736973	
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C 459	12.8	0.6	17	1	AX738573	ACCESSION:AX738573	
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C 463	12.8	0.6	17	1	AX744990	ACCESSION:AX744990	
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C 467	12.8	0.6	17	1	AX760702	ACCESSION:AX760702	
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C 469	12.8	0.6	17	1	AX761719	ACCESSION:AX761719	
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C 471	12.8	0.6	17	1	AX783358	ACCESSION:AX783358	

C 472	12.8	0.6	17	1	AX783359	ACCESSION:AX783359
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C 474	12.8	0.6	17	1	AX783686	ACCESSION:AX783686
C 475	12.8	0.6	17	1	AX783827	ACCESSION:AX783827
C 476	12.8	0.6	17	1	AX783829	ACCESSION:AX783829
C 477	12.8	0.6	17	1	AX801881	ACCESSION:AX801881
C 478	12.8	0.6	17	1	BD067275	ACCESSION:BD067275
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C 480	12.8	0.6	17	1	BD097042	ACCESSION:BD097042
481	12.8	0.6	17	1	BD104893	ACCESSION:BD104893
482	12.8	0.6	17	1	BD104895	ACCESSION:BD104895
483	12.8	0.6	17	1	BD105167	ACCESSION:BD105167
484	12.8	0.6	17	1	AB068528	ACCESSION:AB068528

ALIGNMENTS

RESULT 1

AX316131/c

LOCUS

AX316131

Sequence 22 from Patent WO190363.

DEFINITION

AX316131

ACCESSION

AX316131.1

GI:17899322

VERSION

KEYWORDS

SOURCE

ORGANISM

synthetic construct

other sequences; artificial sequences.

REFERENCE

1

AUTHORS

Verheije,M.H. and Meulenber,J.J.

TITLE

Chimeric arterivirus-like particles

JOURNAL

Patent: WO 0190363-A 22 29-NOV-2001;

ID-Lelystad, Instituut voor Dierhouderij en Diergezondheid B.V.

(NL)

FEATURES

Location/Qualifiers

1..44

source

/organism="synthetic construct"

/mol\_type="unassigned DNA"

/db\_xref="taxon:32630"

/note="primer PRRSV57"

Query Match

Best Local Similarity

1.9%; Score 39.2; DB 1; Length 44;

Matches

41; Conservative

0; Mismatches

3; Indels

0; Gaps

0;

Qy

1006

CGGAACAATGGAGTCCTTAGATGACTTCTGTCATGATAGCA

1049

Db

44

CTGAGCAATGGGGCGCCTTAGATGACTTCTGTCATGATAGCA

1

RESULT 2

AR146991/c

LOCUS

AR146991

Sequence 51 from patent US 6221361.

DEFINITION

AR146991

ACCESSION

AR146991.1

GI:15110794

VERSION

KEYWORDS

SOURCE

ORGANISM

Unknown.

Unclassified.

1 (bases 1 to 38)

AUTHORS

Cochran,M.D. and Junker,D.E.

TITLE

Recombinant swinepox virus

JOURNAL

Patent: US 6221361-A 51 24-APR-2001;

FEATURES

Location/Qualifiers

1..38

source

/organism="unknown"

/mol\_type="unassigned DNA"

Query Match

Best Local Similarity

1.5%; Score 30; DB 1; Length 38;

Matches

33; Conservative

0; Mismatches

5; Indels

0; Gaps

0;

Qy	387	GTCTTTTGGCATCTGTTGGCAATTTGAATGTTTAA	424
Db	38	GTCTTTTGGCATCTGTTGGCAATTTGAAGTCCAG	1
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DEFINITION	Sequence 47 from patent US 6221361.	33 bp	DNA
ACCESSION	ARI146987		
VERSION	ARI146987.1	GI:15110790	
KEYWORDS	Unknown.		
SOURCE	Unknown.		
ORGANISM	Unclassified.		
REFERENCE	1 (bases 1 to 33)		
AUTHORS	Cochran,M.D. and Junker,D.E.		
TITLE	Recombinant swinepox virus		
JOURNAL	Patent: US 6221361-A 47 24-APR-2001;		
FEATURES	Location/Qualifiers		
source	1..33		
	/organism="unknown"		
	/mol_type="unassigned DNA"		
Query Match	1.5%; Score 29.8; DB 1; Length 33;		
Best Local Similarity	93.9%; Pred. No. 9.9;		
Matches	31; Conservative 0; Mismatches 2; Indels 0; Gaps 0;		
Qy	1882	CATCACCTCAGCATGATGGCTGGCATCTTG	1914
Db	33	CATCACCTCAGCATGATGGCTGGCATCTTG	1
RESULT 4			
LOCUS	ARI146986		
DEFINITION	Sequence 46 from patent US 6221361.	37 bp	DNA
ACCESSION	ARI146986		
VERSION	ARI146986.1	GI:15110789	
KEYWORDS	Unknown.		
SOURCE	Unknown.		
ORGANISM	Unclassified.		
REFERENCE	1 (bases 1 to 37)		
AUTHORS	Cochran,M.D. and Junker,D.E.		
TITLE	Recombinant swinepox virus		
JOURNAL	Patent: US 6221361-A 46 24-APR-2001;		
FEATURES	Location/Qualifiers		
source	1..37		
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	/mol_type="unassigned DNA"		
Query Match	1.4%; Score 29; DB 1; Length 37;		
Best Local Similarity	86.5%; Pred. No. 15;		
Matches	32; Conservative 0; Mismatches 5; Indels 0; Gaps 0;		
Qy	1520	GTTAAATATGCCAAATAACACCGGCAAGCAGCAGAG	1556
Db	1	GTCGAATGCCAATACACCGGCAAGCAGCAGAG	37
RESULT 5			
LOCUS	ARI146993/c		
DEFINITION	Sequence 53 from patent US 6221361.	34 bp	DNA
ACCESSION	ARI146993		
VERSION	ARI146993.1	GI:15110796	
KEYWORDS	Unknown.		
SOURCE	Unknown.		
ORGANISM	Unclassified.		
REFERENCE	1 (bases 1 to 34)		
AUTHORS	Cochran,M.D. and Junker,D.E.		
Qy	387	GTCTTTTGGCATCTGTTGGCAATTTGAATGTTTAA	424
Db	38	GTCTTTTGGCATCTGTTGGCAATTTGAAGTCCAG	1
RESULT 6			
LOCUS	ARI146954/c		
DEFINITION	Sequence 26 from Patent WO9803658.	32 bp	DNA
ACCESSION	A68954		
VERSION	A68954.1	GI:4759879	
KEYWORDS	unidentified		
SOURCE	unidentified		
ORGANISM	unclassified.		
REFERENCE	1 (bases 1 to 32)		
AUTHORS	Baudu,P., Riviere,M., Audonnet,J. and Bouchardon,A.		
TITLE	POLYNUCLEOTIDE VACCINE FORMULA FOR TREATING PORCINE RESPIRATORY AND REPRODUCTIVE DISEASES		
JOURNAL	Patent: WO 9803658-A 26 29-JAN-1998;		
COMMENT	BAUDU PHILIPPE (FR)		
FEATURES	Other publication FR 2751224 19980123.		
source	1..32		
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	/mol_type="unassigned DNA"		
	/db_xref="taxon:32644"		
Query Match	1.2%; Score 25.6; DB 1; Length 32;		
Best Local Similarity	87.5%; Pred. No. 30;		
Matches	28; Conservative 0; Mismatches 4; Indels 0; Gaps 0;		
Qy	76	CCCTCAGTCCGCGACGCGATAGGACACCG	107
Db	32	CCCTCAGTCCGCGATAGGACACCG	1
RESULT 7			
LOCUS	ARI139180/c		
DEFINITION	Sequence 32 from patent US 6207165.	32 bp	DNA
ACCESSION	ARI139180		
VERSION	ARI139180.1	GI:14481676	
KEYWORDS	Unknown.		
SOURCE	Unknown.		
ORGANISM	Unclassified.		
REFERENCE	1 (bases 1 to 32)		
AUTHORS	Audonnet,J.-C., Bouchardon,A., Baudu,P. and Riviere,M.		
TITLE	Polynucleotide formula against porcine reproductive and respiratory pathologies		
JOURNAL	Patent: US 6207165-A 32 27-MAR-2001;		
FEATURES	Location/Qualifiers		
source	1..32		
	/organism="unknown"		
	/mol_type="unassigned DNA"		
Query Match	1.2%; Score 25.6; DB 1; Length 32;		
Best Local Similarity	87.5%; Pred. No. 30;		
Matches	28; Conservative 0; Mismatches 4; Indels 0; Gaps 0;		
Qy	76	CCCTCAGTCCGCGACGCGATAGGACACCG	107



REFERENCE 1 (bases 1 to 30)  
AUTHORS Paul, P.S. and Zhang, Y.  
TITLE Protein encoded by polynucleic acid of porcine reproductive and respiratory syndrome virus (PRRSV)  
JOURNAL Patent: JP 2002504317-A 19 12-FEB-2002;  
IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC, AMERICAN CYANAMID CO  
COMMENT OS Artificial Sequence  
PN JP 2002504317-A/19  
PD 12-FEB-2002  
PF 08-FEB-1999 JP 2000530103  
PI 06-FEB-1998 US 09/019793  
PC C12N15/09, A61K39/12, A61P31/14, C07K14/08, C12Q1/68, C07K16/10, C12N15/00  
CC Description of Artificial Sequence: Synthetic DNA FH Key  
FT Location/Qualifiers  
FT source 1..30  
/organism='Artificial Sequence'.  
/location/Qualifiers  
1..30  
/organism="synthetic construct"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32630"

Query Match 1..26; Score 23.6; DB 1; Length 30;  
Best Local Similarity 86.7%; Pred. No. 46;  
Matches 26; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1064 GTCTCTTGGCGTTTCTATTACTACACG 1093  
Db |||||

RESULT 13  
E49336/c  
LOCUS 26 bp DNA linear PAT 31-JAN-2002  
DEFINITION Infectious cDNA clone of North American porcine reproductive and respiratory syndrome (PRRS) virus and use thereof.  
ACCESSION E49336.1 GI:18628067  
VERSION JP 200189178-A/45.  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 26)  
AUTHORS Calvert, J.G., George, M. and Welsh, S.H.  
TITLE Infectious cDNA clone of North American porcine reproductive and respiratory syndrome (PRRS) virus and use thereof  
JOURNAL Patent: JP 2000189178-A 45 11-JUL-2000;  
PFIZER PROD INC  
COMMENT OS Artificial Sequence  
PN JP 2000189178-A/45  
PD 11-JUL-2000  
PF 21-DEC-1999 JP 1999362186  
PR 22-DEC-1998 US 60/113345  
PI J GREGORI CALVERT, MICHAEL GEORGE, SHAKUN HWANG WELSHU PC  
C12N15/09, A61K39/12, A61K48/00, A61P31/12, C12N1/15, C12N1/19, PC  
C12N1/21.  
PC C12N5/10, C12N15/00, C12N5/00  
CC  
FH Key Location/Qualifiers  
FT source 1..26  
/organism="synthetic construct"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32630"

FEATURES  
source  
1..26  
Location/Qualifiers  
/organism='Artificial Sequence'.  
Query Match 1..16; Score 22.8; DB 1; Length 26;  
Best Local Similarity 92.3%; Pred. No. 46;  
Matches 24; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1064 GTCTCTTGGCGTTTCTATTACTACACG 1093  
Db |||||

RESULT 13  
E49336/c  
LOCUS 26 bp DNA linear PAT 31-JAN-2002  
DEFINITION Infectious cDNA clone of North American porcine reproductive and respiratory syndrome (PRRS) virus and use thereof.  
ACCESSION E49336.1 GI:18628067  
VERSION JP 200189178-A/45.  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 26)  
AUTHORS Calvert, J.G., George, M. and Welsh, S.H.  
TITLE Infectious cDNA clone of North American porcine reproductive and respiratory syndrome (PRRS) virus and use thereof  
JOURNAL Patent: JP 2000189178-A 45 11-JUL-2000;  
PFIZER PROD INC  
COMMENT OS Artificial Sequence  
PN JP 2000189178-A/45  
PD 11-JUL-2000  
PF 21-DEC-1999 JP 1999362186  
PR 22-DEC-1998 US 60/113345  
PI J GREGORI CALVERT, MICHAEL GEORGE, SHAKUN HWANG WELSHU PC  
C12N15/09, A61K39/12, A61K48/00, A61P31/12, C12N1/15, C12N1/19, PC  
C12N1/21.  
PC C12N5/10, C12N15/00, C12N5/00  
CC  
FH Key Location/Qualifiers  
FT source 1..26  
/organism="synthetic construct"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32630"

FEATURES  
source  
1..26  
Location/Qualifiers  
/organism='Artificial Sequence'.  
Query Match 1..16; Score 22.8; DB 1; Length 26;  
Best Local Similarity 92.3%; Pred. No. 46;  
Matches 24; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 473 TTGTGGTGTATCGTCGCCGCTCTGTT 498  
Db |||||

RESULT 14  
AR269194/c  
LOCUS 26 bp DNA linear PAT 10-APR-2003  
DEFINITION Sequence 45 from patent US 6500662.  
ACCESSION AR269194  
VERSION AR269194.1 GI:29700136  
KEYWORDS Unknown.  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 26)  
AUTHORS Calvert, J.G., Sheppard, M.G. and Welch, S.-K.W.  
TITLE Infectious cDNA clone of North American porcine reproductive and respiratory syndrome (PRRS) virus and uses thereof  
JOURNAL Patent: US 6500662-A 45 31-DEC-2002;  
FEATURES Location/Qualifiers  
source 1..26  
/organism="unknown"  
/mol\_type="genomic DNA"

Query Match 1..16; Score 22.8; DB 1; Length 26;  
Best Local Similarity 92.3%; Pred. No. 46;  
Matches 24; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 473 TTGTGGTGTATCGTCGCCGCTCTGTT 498  
Db |||||

RESULT 15  
BD015919/c  
LOCUS 26 bp DNA linear PAT 27-AUG-2002  
DEFINITION Infectious cDNA clone of North American porcine reproductive and respiratory syndrome (PRRS) virus and use thereof.  
ACCESSION BD015919  
VERSION BD015919.1 GI:22557056  
KEYWORDS JP 2001218591-A/45.  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 26)  
AUTHORS Calvert, J.G., Sheppard, M.G. and Welsh, S.K.W.  
TITLE Infectious cDNA clone of North American porcine reproductive and respiratory syndrome (PRRS) virus and use thereof  
JOURNAL Patent: JP 2001218591-A 45 14-AUG-2001;  
PFIZER PRODUCTS INC  
COMMENT OS Artificial Sequence  
PN JP 2001218591-A/45  
PD 14-AUG-2001  
PF 06-DEC-2000 JP 2000372096  
PR 22-DEC-1998 US 60/113345  
PI J GREGORY CALVERT, MICHAEL GEORGE SHEPHERD, SHAO KUN WAN WELSH  
PC C12N15/09, A61K35/76, A61K39/12, A61K48/00, A61P31/14, C07H21/02, C12N5/10,  
PC C12N7/00, C12N7/04, G01N33/15, G01N33/50, G01N33/569, C12N5/10,  
PC C12R1/91,  
PC (C12N7/00, C12R1/93), C12N15/00, C12N5/00, (C12N5/00, C12R1/91) CC  
Description of Artificial Sequence: Primer, reverse, used for synthesizing  
CC downstream flanking region to insertion  
site between ORF1b and  
CC ORF2  
FH Key Location/Qualifiers  
FT source 1..26  
/organism='Artificial Sequence'.  
FEATURES  
source  
1..26  
Location/Qualifiers  
/organism="synthetic construct"

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/mol_type="genomic DNA"
/db_xref="taxon:32630"

Query Match      1.1%; Score 22.8; DB 1; Length 26;
Best Local Similarity 92.3%; Pred. No. 46;
Matches 24; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 473 TTGTGTTGATCGTCCGCTCTGTT 498
      |||||
Db 26 TTGTGTTGATCGTCCGCTCTGTT 1

RESULT 16
BD016287/c
LOCUS      26 bp      DNA      linear      PAT 27-AUG-2002
DEFINITION Infectious cDNA clone of North American porcine reproductive and
            respiratory syndrome (PRRS) virus and utilization thereof.
ACCESSION  BD016287
VERSION     JP 2001224384-A/45.
KEYWORDS   synthetic construct
SOURCE     synthetic construct
ORGANISM   other sequences; artificial sequences.
REFERENCE  1 (bases 1 to 26)
AUTHORS   Calvart,J.G., Sheppard,M.G. and Welch,S.K.W.
TITLE     Infectious cDNA clone of North American porcine reproductive and
            respiratory syndrome (PRRS) virus and utilization thereof
JOURNAL    Patent: JP 2001224384-A 45 21-AUG-2001;
            PFIZER PRODUCTS INC
COMMENT    OS Artificial Sequence
            PN JP 2001224384-A/45
            PD 21-AUG-2001
            PR 06-DEC-2000 JP 2000372087
            PI 22-DEC-1998 US 60/113345
            PJ JAY GREGORY CALVART,MICHAEL GEORGE SHEPPARD,STAO KUN WAN WELCH
            PC C12N15/09,A61K39/12,A61P11/00,A61P15/00,A61P31/14,C12N1/15, PC
            C12N1/19,
            PC C12N1/21,C12N5/10,C12N7/00,G01N33/15,G01N33/50,G01N33/569// PC
            C07K14/08,
            PC C12P21/02,(C12N15/09,C12R1:93),(C12N7/00,C12R1:93),C12N15/00,
            PC C12N5/00,
            PC (C12N15/00,C12R1:93)
            CC Description of Artificial Sequence: Primer, reverse, used for
            CC synthesizing
            CC downstream flanking region to insertion
            CC site between ORF1b and
            CC site between ORF2
FH Key      Location/Qualifiers
FT source   1..26
FT          /organism="synthetic construct"
FT          /mol_type="genomic DNA"
FT          /db_xref="taxon:32630"

FEATURES
source
    1..26
    /organism="synthetic construct"
    /mol_type="genomic DNA"
    /db_xref="taxon:32630"

Query Match      1.1%; Score 22.8; DB 1; Length 26;
Best Local Similarity 92.3%; Pred. No. 46;
Matches 24; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 473 TTGTGTTGATCGTCCGCTCTGTT 498
      |||||
Db 26 TTGTGTTGATCGTCCGCTCTGTT 1

RESULT 17
A83346/c
LOCUS      30 bp      DNA      linear      PAT 21-JAN-2000
DEFINITION Sequence 45 from Patent WO9850426.
ACCESSION  A83346
VERSION     A83346.1 GI:6732730
KEYWORDS   .
SOURCE     unidentified

/mol_type="genomic DNA"
/db_xref="taxon:32630"

Query Match      1.1%; Score 22.8; DB 1; Length 26;
Best Local Similarity 92.3%; Pred. No. 46;
Matches 24; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 473 TTGTGTTGATCGTCCGCTCTGTT 498
      |||||
Db 26 TTGTGTTGATCGTCCGCTCTGTT 1

RESULT 18
AR266536/c
LOCUS      30 bp      DNA      linear      PAT 10-APR-2003
DEFINITION Sequence 45 from patent US 6495138.
ACCESSION  AR266536
VERSION     AR266536.1 GI:29699511
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 30)
AUTHORS   van Nieuwstadt,A.P., Langeveld,J. and Meulenbergh,J.
TITLE     PRRSv antigenic sites identifying peptide sequences of PRRS virus
            for use in vaccines or diagnostic assays
JOURNAL    Patent: US 6495138-A 45 17-DEC-2002;
            Location/Qualifiers
FEATURES   source
            1..30
            /organism="unknown"
            /mol_type="genomic DNA"

Query Match      1.1%; Score 22.6; DB 1; Length 30;
Best Local Similarity 86.2%; Pred. No. 60;
Matches 25; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 434 GAAATGCTTGACCGCGGCTGTTGCTCGC 462
      |||||
Db 29 GAAATGCTTGACCGCGGCTGTTGCTCGC 1

RESULT 19
AR107513/c
LOCUS      22 bp      DNA      linear      PAT 14-FEB-2001
DEFINITION Sequence 1 from patent US 6110467.
ACCESSION  AR107513
VERSION     AR107513.1 GI:12823000
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 22)
AUTHORS   Paul,P.S., Halbur,P.G., Meng,X.-J., Lyoo,Y.S. and Lum,M.Anne.
TITLE     Isolated porcine respiratory and reproductive virus, vaccines and
            methods of protecting a pig against a disease caused by a porcine
            respiratory and reproductive virus
JOURNAL    Patent: US 6110467-A 1 29-AUG-2000;
            Location/Qualifiers
FEATURES   source
            1..22
            /organism="unknown"
            /mol_type="unassigned DNA"
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Query Match 1.1%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 45;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2023 ATTGGCGAGAACACACACGCGCG 2044
Db 22 ATTGGCGAGAACACACACGCGCG 1

RESULT 20
LOCUS AR107514 22 bp DNA linear PAT 14-FEB-2001
DEFINITION Sequence 2 from patent US 6110467.
ACCESSION AR107514
VERSION AR107514.1 GI:12823001
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 22)
AUTHORS Paul,P.S., Halbur,P.G., Meng,X.-J., Lyoo,Y.S. and Lum,M.Anne.
TITLE Isolated porcine respiratory and reproductive virus, vaccines and
methods of protecting a pig against a disease caused by a porcine
respiratory and reproductive virus
JOURNAL Patent: US 6110467-A 2 23-AUG-2000;
FEATURES Location/Qualifiers
source 1..22
/mol_type="unassigned DNA"

Query Match 1.1%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 45;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1683 CCCATTTCCTCTAGCGACTG 1704
Db 1 CCCATTTCCTCTAGCGACTG 22

RESULT 21
LOCUS AR158131 22 bp DNA linear PAT 17-OCT-2001
DEFINITION Sequence 91 from patent US 6251397.
ACCESSION AR158131
VERSION AR158131.1 GI:16220138
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 22)
AUTHORS Paul,P.S., Meng,X.-J., Halbur,P. and Morozov,I.
TITLE Proteins encoded by polynucleic acids isolated from a porcine
reproductive and respiratory syndrome virus and immunogenic
compositions containing the same
JOURNAL Patent: US 6251397-A 91 26-JUN-2001;
FEATURES Location/Qualifiers
source 1..22
/mol_type="unassigned DNA"

Query Match 1.1%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 45;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1683 CCCATTTCCTCTAGCGACTG 1704
Db 1 CCCATTTCCTCTAGCGACTG 22

RESULT 22
LOCUS AR158132/c 22 bp DNA linear PAT 17-OCT-2001
DEFINITION Sequence 92 from patent US 6251397.
ACCESSION AR158132
VERSION AR158132.1 GI:16220139
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 22)
AUTHORS Paul,P.S., Meng,X.-J., Halbur,P. and Morozov,I.
TITLE Proteins encoded by polynucleic acids isolated from a porcine
reproductive and respiratory syndrome virus and immunogenic
compositions containing the same
JOURNAL Patent: US 6251397-A 92 26-JUN-2001;
FEATURES Location/Qualifiers
source 1..22
/mol_type="unassigned DNA"

Query Match 1.1%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 45;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2023 ATTGGCGAGAACACACACGCGCG 2044
Db 22 ATTGGCGAGAACACACACGCGCG 1

RESULT 23
LOCUS AR158312/c 22 bp DNA linear PAT 17-OCT-2001
DEFINITION Sequence 1 from patent US 6251404.
ACCESSION AR158312
VERSION AR158312.1 GI:16220332
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 22)
AUTHORS Paul,P.S., Halbur,P.G., Meng,X.-J., Lyoo,Y.S. and Lum,M.Anne.
TITLE Method of producing a vaccine which raises an immunological
response against a virus causing a porcine respiratory and
reproductive disease
JOURNAL Patent: US 6251404-A 1 26-JUN-2001;
FEATURES Location/Qualifiers
source 1..22
/mol_type="unassigned DNA"

Query Match 1.1%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 45;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2023 ATTGGCGAGAACACACACGCGCG 2044
Db 22 ATTGGCGAGAACACACACGCGCG 1

RESULT 24
LOCUS AR158313 22 bp DNA linear PAT 17-OCT-2001
DEFINITION Sequence 2 from patent US 6251404.
ACCESSION AR158313
VERSION AR158313.1 GI:16220333
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 22)
AUTHORS Paul,P.S., Halbur,P.G., Meng,X.-J., Lyoo,Y.S. and Lum,M.Anne.
TITLE Method of producing a vaccine which raises an immunological
response against a virus causing a porcine respiratory and
reproductive disease
JOURNAL Patent: US 6251404-A 2 26-JUN-2001;
FEATURES Location/Qualifiers
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source 1..22
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 1.1%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 45;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1683 CCCCATTTCCCTCTAGCGACTG 1704
Db 1 CCCCATTTCCCTCTAGCGACTG 22

RESULT 25
BD137790
LOCUS BD137790 22 bp DNA linear PAT 18-SEP-2002
DEFINITION Protein encoded by polynucleic acid of porcine reproductive and
respiratory syndrome virus (PRRSV).
ACCESSION BD137790.1 GI:23232735
VERSION JP 2002504317-A/75.
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 22)
AUTHORS Paul, P.S. and Zhang, Y.
TITLE Protein encoded by polynucleic acid of porcine reproductive and
respiratory syndrome virus (PRRSV)
JOURNAL
COMMENT IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC, AMERICAN CYANAMID CO
OS Artificial Sequence
PN JP 2002504317-A/75
PD 12-FEB-2002
PF 08-FEB-1999 JP 2000530103
PR 06-FEB-1998 US 09/019793
PI PREM S PAUL, YANJIN ZHANG
PC C12N15/09, A61K39/12, A61P31/14, C07K14/08, C12Q1/68//C07K16/10,
C12N15/00
CC Description of Artificial Sequence: Synthetic DNA FH Key
FT Location/Qualifiers
FT source 1..22
FEATURES
source Location/Qualifiers
1..22 /organism="Artificial Sequence".

Query Match 1.1%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 45;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2023 ATTGGCGAGAACCAACGCGCG 2044
Db 22 ATTGGCGAGAACCAACGCGCG 1

RESULT 27
E49311
LOCUS E49311 22 bp DNA linear PAT 31-JAN-2002
DEFINITION Infectious cDNA clone of North American porcine reproductive and
respiratory syndrome (PRRS) virus and use thereof.
ACCESSION E49311
VERSION E49311.1 GI:18628042
KEYWORDS JP 2000189178-A/20.
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE 1 (bases 1 to 22)
AUTHORS Calvert, J.G., George, M. and Welsh, S.H.
TITLE Infectious cDNA clone of North American porcine reproductive and
respiratory syndrome (PRRS) virus and use thereof
JOURNAL Patent: JP 2000189178-A 20 11-JUL-2000;
PFIZER PROD INC
COMMENT OS Artificial Sequence
PN JP 2000189178-A/20
PD 11-JUL-2000
PF 21-DEC-1999 JP 1999362186
PR 22-DEC-1998 US 60/113345
PI J GUREGORI CALVERT, MICHAEL GEORGE, SHAO KUN HWANG WELSHU PC
C12N15/09, A61K39/12, A61K48/00, A61P31/12, C12N1/15, C12N1/19, PC
C12N1/21,
CC C12N5/10, C12N15/00, C12N5/00
FT Location/Qualifiers
FT Key Location/Qualifiers
FT source 1..22
FEATURES
source Location/Qualifiers
1..22 /organism="Artificial Sequence".

Query Match 1.1%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 45;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1872 CGCGTCACAGCATCACCTCTCAG 1893
Db 1 CGCGTCACAGCATCACCTCTCAG 22
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RESULT 28.  
184203/c  
LOCUS 184203 22 bp DNA linear PAT 04-APR-1998  
DEFINITION Sequence 1 from patent US 5695766.  
ACCESSION 184203  
VERSION 184203.1 GI:3021723  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Paul, P.S., Halbur, P.G., Meng, X.-J., Lyoo, Y.S. and Lum, M. Anne.  
TITLE Highly virulent porcine reproductive and respiratory syndrome viruses which produce lesions in pigs and vaccines that protect pigs against said syndrome  
JOURNAL Patent: US 5695766-A 1 09-DEC-1997;  
FEATURES Location/Qualifiers  
source 1..22  
/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 1..1%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 45;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 2023 ATTGGCGAGAACACACGCGCG 2044  
Db 22 ATTGGCGAGAACACACGCGCG 1  
RESULT 29  
184204  
LOCUS 184204 22 bp DNA linear PAT 04-APR-1998  
DEFINITION Sequence 2 from patent US 5695766.  
ACCESSION 184204  
VERSION 184204.1 GI:3021724  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Paul, P.S., Halbur, P.G., Meng, X.-J., Lyoo, Y.S. and Lum, M. Anne.  
TITLE Highly virulent porcine reproductive and respiratory syndrome viruses which produce lesions in pigs and vaccines that protect pigs against said syndrome  
JOURNAL Patent: US 5695766-A 2 09-DEC-1997;  
FEATURES Location/Qualifiers  
source 1..22  
/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 1..1%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 45;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1683 CCCATTTCCTCTAGCGACTG 1704  
Db 1 CCCATTTCCTCTAGCGACTG 22  
RESULT 30  
AR269169  
LOCUS AR269169 22 bp DNA linear PAT 10-APR-2003  
DEFINITION Sequence 20 from patent US 6500662.  
ACCESSION AR269169  
VERSION AR269169.1 GI:29700111  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Calvert, J.G., Sheppard, M.G. and Welch, S.-K.W.  
TITLE Infectious cDNA clone of North American porcine reproductive and

respiratory syndrome (PRRS) virus and uses thereof  
JOURNAL Patent: US 6500662-A 20 31-DEC-2002;  
FEATURES Location/Qualifiers  
source 1..22  
/organism="unknown"  
/mol\_type="genomic DNA"  
Query Match 1..1%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 45;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1872 CGCGTCACAGCATCACCCCTCAG 1893  
Db 1 CGCGTCACAGCATCACCCCTCAG 22  
RESULT 31  
AR353117/c  
LOCUS AR353117 22 bp DNA linear PAT 17-AUG-2003  
DEFINITION Sequence 1 from patent US 6592873.  
ACCESSION AR353117  
VERSION AR353117.1 GI:33758830  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Paul, P.S., Meng, X.-J., Halbur, P., Morozov, I. and Lum, M.A.  
TITLE Polynucleic acids isolated from a porcine reproductive and respiratory syndrome virus (PRRSV) and proteins encoded by the polynucleic acids  
JOURNAL Patent: US 6592873-A 1 15-JUL-2003;  
FEATURES Location/Qualifiers  
source 1..22  
/organism="unknown"  
/mol\_type="genomic DNA"  
Query Match 1..1%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 45;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 2023 ATTGGCGAGAACACACGCGCG 2044  
Db 22 ATTGGCGAGAACACACGCGCG 1  
RESULT 32  
AR353118  
LOCUS AR353118 22 bp DNA linear PAT 17-AUG-2003  
DEFINITION Sequence 2 from patent US 6592873.  
ACCESSION AR353118  
VERSION AR353118.1 GI:33758831  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Paul, P.S., Meng, X.-J., Halbur, P., Morozov, I. and Lum, M.A.  
TITLE Polynucleic acids isolated from a porcine reproductive and respiratory syndrome virus (PRRSV) and proteins encoded by the polynucleic acids  
JOURNAL Patent: US 6592873-A 2 15-JUL-2003;  
FEATURES Location/Qualifiers  
source 1..22  
/organism="unknown"  
/mol\_type="genomic DNA"  
Query Match 1..1%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 45;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1683 CCCATTTCCTCTAGCGACTG 1704



**TITLE** Method and kit using recombinant proteins in fusion of porcine reproductive and respiratory syndrome virus and for diagnosis

**JOURNAL** Patent: US 6592870-A 5 15-JUL-2003;

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1. .21
source
location/qualifiers
/organism="unknown"
/mol type="genomic DNA"

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Query Match 1.0%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 55;  
Matches 21; Conservative 0; Mismatches 0; Indels

QY 1522 TAAATATGCCAAATAACACCG 1542  
 Db 1 TAAATATGCCAAATAACACCG 21

RESULT 37	AR107515/c	AR107515	Sequence 3 from patent US 6110467.	20 bp	DNA	linear	PAT 14-FEB-2001
	LOCUS	AR107515	AR107515				
	DEFINITION	AR107515	Sequence 3 from patent US 6110467.				
	ACCESSION	AR107515	AR107515				
	VERSION	AR107515.1	GI:12823002				

SOURCE	Unknown.
ORGANISM	Unknown.
REFERENCE	Unclassified.
AUTHORS	1 (bases 1 to 20)
TITLE	Paul, P. S., Habut, P. G., Meng, X.-J., Lyoo, Y. S. and Lum, M. Anne. Isolated porcine respiratory and reproductive virus, vaccines and methods of protecting a pig against a disease caused by a porcine respiratory and reproductive virus
JOURNAL	Patent: US 6110467-A 3 29-AUG-2000;

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1. .20
source
/organism="unknown"
/mol_type="unassigned DNA"

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Query Match 1.0%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 67;  
Matches 20; Conservative 0; Mismatches 0; Indels

Qy 963 GTGCTTGATGGTTCCGCGGC 982  
|||  
Db 20 GTGCTTGATGGTTCCGCGGC 1

RESULT 38				
AR107516				
LOCUS	AR107516	20 bp	DNA	linear
DEFINITION	Sequence 4 from patent US 6110467.			
ACCESSION	AR107516			
VERSION	AR107516.1	GI:12823003		
				PAT 14-FEB-2001

SOURCE	Unknown.
ORGANISM	Unknown.
REFERENCE	Unclassified.
AUTHORS	1 (bases 1 to 20)
TITLE	Paul, P. S., Halbur, P. C., Meng, X.-J., Lyoo, Y. S. and Lum, M. Anne. Isolated porcine respiratory and reproductive virus, vaccines and isolates of protecting a pig against a disease caused by a porcine respiratory and reproductive virus
JOURNAL	Patent: US 6110467-A 4 29-AUG-2000;

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FEATURES
  source
    1..20
      /organism="unknown"
      /mol type="unassigned DNA"

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Query Match 1.0%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 67;  
Matches 20; Conservative 0; Mismatches 0; Indels

Qy 554 CAACTTGACGCTATGTGAGC 573

Db  
1 CAACTTGACGCTATGTGAC 20

RESULT 39	20 bp	DNA	linear	PAT 14-FEB-2001
ARI07517/c				
LOCUS				
DEFINITION	Sequence 5	from patent US 6110467.		
ACCESSION	ARI07517			
VERSION	ARI07517.1	GI:12823004		
KEYWORDS	.			
SOURCE	Unknown.			

REFERENCE	1 (bases 1 to 20)
AUTHORS	Paul, P.S., Halbur, P.G., Meng, X.-J., Lyoo, Y.S. and Lum, M. Anne.
TITLE	Isolated porcine respiratory and reproductive virus, vaccines and methods of protecting a pig against a disease caused by a porcine respiratory and reproductive virus
JOURNAL	Patent: US 6110467-A 5 29-AUG-2000;
FEATURES	Location/Qualifiers
source	1..20 /organism="unknown" /mol type="unassigned DNA"

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Query Match      1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1752 CTGTGTCATCCAGACCGC 1771
          |||||
Db       20 CTGTGTCATCCAGACCGC 1

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RESULT	40
AR107518	
LOCUS	20 bp DNA linear PAT 14-FEB-2001
DEFINITION	Sequence 6 from patent US 6110467.
ACCESSION	AR107518
VERSION	AR107518.1 GI:12823005
KEYWORDS	.
SOURCE	Unknown.

REFERENCE  
AUTHORS  
TITLE  
JOURNAL  
FEATURES

1 (bases 1 to 20)  
Paul, P. S., Halbur, P. G., Meng, X.-J., Lyoo, Y. S. and Lum, M. Anne.  
Isolated porcine respiratory and reproductive virus, vaccines and  
methods of protecting a pig against a disease caused by a porcine  
respiratory and reproductive virus  
Patent: US 6110467-A 6 29-AUG-2000;  
Location/Qualifiers  
1. .20  
/organism="unknown"  
/mol type="unassigned DNA"

Query Match	1.0%;	Score 20;	DB 1;	Length 20;
Best Local Similarity	100.0%;	Pred. No. 67;		
Matches	20;	Conservative 0;	Mismatches 0;	Indels 0;
Gaps	0;			
QY	1131	GACTGCTAGGGCTTCTGCAC	1150	
Db	1	GACTGCTAGGGCTTCTGCAC	20	

RESULT	41
LOCUS	AR107519/c
DEFINITION	Sequence 7 from patent US 6110467.
ACCESSION	AR107519
VERSION	AR107519.1 GI:12823006
KEYWORDS	.
SOURCE	Unknown.
ORGANISM	Unknown.
	linear
	DNA
	PAT 14-FEB-2001



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VERSION AR158315.1 GI:16220335
KEYWORDS
SOURCE
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 20)
AUTHORS Paul.P.S., Halbur.P.G., Meng.X.-J., Lyoo.Y.S. and Lum.M.Anne.
TITLE Method of producing a vaccine which raises an immunological response against a virus causing a porcine respiratory and reproductive disease
JOURNAL Patent: US 6251404-A 4 26-JUN-2001;
FEATURES Location/Qualifiers
source 1..20
/mol_type="unassigned DNA"

Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 554 CAACTTGACGCTATGTGAGC 573
Db 1 CAACTTGACGCTATGTGAGC 20

RESULT 47
AR158316/c
LOCUS AR158316
DEFINITION Sequence 5 from patent US 6251404.
ACCESSION AR158316
VERSION AR158316.1 GI:16220336
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 20)
AUTHORS Paul.P.S., Halbur.P.G., Meng.X.-J., Lyoo.Y.S. and Lum.M.Anne.
TITLE Method of producing a vaccine which raises an immunological response against a virus causing a porcine respiratory and reproductive disease
JOURNAL Patent: US 6251404-A 5 26-JUN-2001;
FEATURES Location/Qualifiers
source 1..20
/mol_type="unassigned DNA"

Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1752 CTGTCGTCAATCCAGACCGC 1771
Db 20 CTGTCGTCAATCCAGACCGC 1

RESULT 48
AR158317
LOCUS AR158317
DEFINITION Sequence 6 from patent US 6251404.
ACCESSION AR158317
VERSION AR158317.1 GI:16220337
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 20)
AUTHORS Paul.P.S., Halbur.P.G., Meng.X.-J., Lyoo.Y.S. and Lum.M.Anne.
TITLE Method of producing a vaccine which raises an immunological response against a virus causing a porcine respiratory and reproductive disease
JOURNAL Patent: US 6251404-A 6 26-JUN-2001;
FEATURES Location/Qualifiers
source 1..20
/mol_type="unassigned DNA"

Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1752 CTGTCGTCAATCCAGACCGC 1771
Db 20 CTGTCGTCAATCCAGACCGC 1

RESULT 49
AR158318/c
LOCUS AR158318
DEFINITION Sequence 7 from patent US 6251404.
ACCESSION AR158318
VERSION AR158318.1 GI:16220338
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 20)
AUTHORS Paul.P.S., Halbur.P.G., Meng.X.-J., Lyoo.Y.S. and Lum.M.Anne.
TITLE Method of producing a vaccine which raises an immunological response against a virus causing a porcine respiratory and reproductive disease
JOURNAL Patent: US 6251404-A 7 26-JUN-2001;
FEATURES Location/Qualifiers
source 1..20
/mol_type="unassigned DNA"

Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 562 CGCTATGTGAGCTGAATGGC 581
Db 20 CGCTATGTGAGCTGAATGGC 1

RESULT 50
BD137768/c
LOCUS BD137768
DEFINITION Protein encoded by polynucleic acid of porcine reproductive and respiratory syndrome virus (PRRSV).
ACCESSION BD137768
VERSION BD137768.1 GI:23232713
KEYWORDS JP 2002504317-A/53.
SOURCE Porcine reproductive and respiratory syndrome virus
ORGANISM Viruses; ssRNA positive-strand viruses, no DNA stage; Nidovirales; Arteriviridae; Arterivirus.
REFERENCE 1 (bases 1 to 20)
AUTHORS Paul.P.S. and Zhang.Y.
TITLE Protein encoded by polynucleic acid of porcine reproductive and respiratory syndrome virus (PRRSV)
JOURNAL Patent: JP 2002504317-A 53 12-FEB-2002;
COMMENT IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC,AMERICAN CYANAMID CO
OS Porcine reproductive and respiratory syndrome virus PN JP 2002504317-A/53
PD 12-FEB-2002
PF 08-FEB-1999 JP 2000530103
PR 06-FEB-1998 US 09/019793
PI PREM S PAUL,YANJIN ZHANG
PC C12N15/09,A61K39/12,A61P31/14,C07K14/08,C12Q1/68//C07K16/10,
PC C12N15/00
CC Description of Artificial Sequence:Synthetic DNA FH Key
Location/Qualifiers
FT source 1..20
FT /organism='Porcine reproductive and respiratory
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FT          Location/Qualifiers
source      1..20
            /organism="Porcine reproductive and respiratory syndrome
            virus"
            /mol_type="genomic DNA"
            /db_xref="taxon:28344"

Query Match      1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1092 CGCCAGTGATGATATGACC 1111
      |||||
Db 20 CGCCAGTGATGATATGACC 1

RESULT 51
LOCUS      BD137786          20 bp DNA linear PAT 18-SEP-2002
DEFINITION Protein encoded by polynucleic acid of porcine reproductive and
            respiratory syndrome virus (PRRSV).
ACCESSION  BD137786
VERSION     BD137786.1 GI:23232731
KEYWORDS   JP 2002504317-A/71.
SOURCE     synthetic construct
ORGANISM   other sequences; artificial sequences.
REFERENCE  1 (bases 1 to 20)
AUTHORS    Paul, P.S. and Zhang, Y.
TITLE      Protein encoded by polynucleic acid of porcine reproductive and
            respiratory syndrome virus (PRRSV)
JOURNAL    Patent: JP 2002504317-A 71 12-FEB-2002;
            IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC, AMERICAN CYANAMID CO
COMMENT    OS Artificial Sequence
            PN JP 2002504317-A/71
            PD 12-FEB-2002
            PR 06-FEB-1998 US 09/019793
            PI PREM S PAUL, YANJIN ZHANG
            PC C12N15/09, A61K39/12, A61P31/14, C07K14/08, C12Q1/68//C07K16/10,
            C12N15/00
            CC Description of Artificial Sequence: Synthetic DNA FH Key
            FT source 1..20
            /organism='Artificial Sequence'.

FEATURES
source      1..20
            /organism="synthetic construct"
            /mol_type="genomic DNA"
            /db_xref="taxon:32630"

Query Match      1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 963 GTGCTTGATGCTTCGCGGC 982
      |||||
Db 20 GTGCTTGATGCTTCGCGGC 1

RESULT 53
LOCUS      BD137788          20 bp DNA linear PAT 18-SEP-2002
DEFINITION Protein encoded by polynucleic acid of porcine reproductive and
            respiratory syndrome virus (PRRSV).
ACCESSION  BD137788
VERSION     BD137788.1 GI:23232733
KEYWORDS   JP 2002504317-A/73.
SOURCE     synthetic construct
ORGANISM   other sequences; artificial sequences.
REFERENCE  1 (bases 1 to 20)
AUTHORS    Paul, P.S. and Zhang, Y.
TITLE      Protein encoded by polynucleic acid of porcine reproductive and
            respiratory syndrome virus (PRRSV)
JOURNAL    Patent: JP 2002504317-A 73 12-FEB-2002;
            IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC, AMERICAN CYANAMID CO
COMMENT    OS Artificial Sequence
            PN JP 2002504317-A/73
            PD 12-FEB-2002
            PR 08-FEB-1999 JP 2000530103
            PR 06-FEB-1998 US 09/019793
            PI PREM S PAUL, YANJIN ZHANG
            PC C12N15/09, A61K39/12, A61P31/14, C07K14/08, C12Q1/68//C07K16/10,
            C12N15/00
            CC Description of Artificial Sequence: Synthetic DNA FH Key
            FT source 1..20
            /organism='Artificial Sequence'.

FEATURES
source      1..20
            /organism="synthetic construct"
            /mol_type="genomic DNA"
            /db_xref="taxon:32630"

Query Match      1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 554 CCACTTGACGCTATGTGACC 573
      |||||
Db 1 CCACTTGACGCTATGTGACC 20

RESULT 52
LOCUS      BD137787/c          20 bp DNA linear PAT 18-SEP-2002
DEFINITION Protein encoded by polynucleic acid of porcine reproductive and
            respiratory syndrome virus (PRRSV).
ACCESSION  BD137787
VERSION     BD137787.1 GI:23232732
KEYWORDS   JP 2002504317-A/72.
SOURCE     synthetic construct
ORGANISM   other sequences; artificial sequences.
REFERENCE  1 (bases 1 to 20)

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AUTHORS      Paul, P.S. and Zhang, Y.
TITLE        Protein encoded by polynucleic acid of porcine reproductive and
            respiratory syndrome virus (PRRSV)
JOURNAL      Patent: JP 2002504317-A 72 12-FEB-2002;
            IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC, AMERICAN CYANAMID CO
COMMENT      OS Artificial Sequence
            PN JP 2002504317-A/72
            PD 12-FEB-2002
            PR 08-FEB-1999 JP 2000530103
            PR 06-FEB-1998 US 09/019793
            PI PREM S PAUL, YANJIN ZHANG
            PC C12N15/09, A61K39/12, A61P31/14, C07K14/08, C12Q1/68//C07K16/10,
            C12N15/00
            CC Description of Artificial Sequence: Synthetic DNA FH Key
            FT source 1..20
            /organism='Artificial Sequence'.

FEATURES
source      1..20
            /organism="synthetic construct"
            /mol_type="genomic DNA"
            /db_xref="taxon:32630"

Query Match      1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 963 GTGCTTGATGCTTCGCGGC 982
      |||||
Db 20 GTGCTTGATGCTTCGCGGC 1

RESULT 53
LOCUS      BD137788          20 bp DNA linear PAT 18-SEP-2002
DEFINITION Protein encoded by polynucleic acid of porcine reproductive and
            respiratory syndrome virus (PRRSV).
ACCESSION  BD137788
VERSION     BD137788.1 GI:23232733
KEYWORDS   JP 2002504317-A/73.
SOURCE     synthetic construct
ORGANISM   other sequences; artificial sequences.
REFERENCE  1 (bases 1 to 20)
AUTHORS    Paul, P.S. and Zhang, Y.
TITLE      Protein encoded by polynucleic acid of porcine reproductive and
            respiratory syndrome virus (PRRSV)
JOURNAL    Patent: JP 2002504317-A 73 12-FEB-2002;
            IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC, AMERICAN CYANAMID CO
COMMENT    OS Artificial Sequence
            PN JP 2002504317-A/73
            PD 12-FEB-2002
            PR 08-FEB-1999 JP 2000530103
            PR 06-FEB-1998 US 09/019793
            PI PREM S PAUL, YANJIN ZHANG
            PC C12N15/09, A61K39/12, A61P31/14, C07K14/08, C12Q1/68//C07K16/10,
            C12N15/00
            CC Description of Artificial Sequence: Synthetic DNA FH Key
            FT source 1..20
            /organism='Artificial Sequence'.

FEATURES
source      1..20
            /organism="synthetic construct"
            /mol_type="genomic DNA"
            /db_xref="taxon:32630"

Query Match      1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1131 GACTGCTAGGCTTTCGAC 1150
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Db 1 GACTGTAGGCTTCTGCAC 20
|||||
20 GTGCTTGATGGTTCCGGGC 1

RESULT 54
BD137834/c
LOCUS BD137834
DEFINITION Protein encoded by polynucleic acid of porcine reproductive and
ACCESSION BD137834
VERSION BD137834.1 GI:23232779
KEYWORDS JP 2002504317-A/119.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 20)
AUTHORS Paul, P.S. and Zhang, Y.
TITLE Protein encoded by polynucleic acid of porcine reproductive and
JOURNAL respiratory syndrome virus (PRRSV)
COMMENT IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC, AMERICAN CYANAMID CO
OS Artificial Sequence
PN JP 2002504317-A/119
PD 12-FEB-2002
PF 08-FEB-1999 JP 2000530103
PR 06-FEB-1998 US 09/019793
PI PREM S PAUL, YANJIN ZHANG
PC C12N15/09, A61K39/12, A61P31/14, C07K14/08, C12Q1/68//C07K16/10,
CC C12N15/00
Description of Artificial Sequence: Synthetic DNA PH Key
FT source
FT 1..20
Location/Qualifiers
FEATURES
source
1..20
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1092 CGCCAGTGATGATATATGCC 1111
|||||
20 CGCCAGTGATGATATATGCC 1

RESULT 55
184205/c
LOCUS 184205
DEFINITION Sequence 3 from patent US 5695766.
ACCESSION 184205
VERSION 184205.1 GI:3021725
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Paul, P.S., Halbur, P.G., Meng, X.-J., Lyoo, Y.S. and Lum, M. Anne.
TITLE Highly virulent porcine reproductive and respiratory syndrome
viruses which produce lesions in pigs and vaccines that protect
pigs against said syndrome
JOURNAL Patent: US 5695766-A 3 09-DEC-1997;
FEATURES Location/Qualifiers
source
1..20
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 963 GTGCTTGATGGTTCCGGGC 982
|||||
20 GTGCTTGATGGTTCCGGGC 1

Db 184206
LOCUS 184206
DEFINITION Sequence 4 from patent US 5695766.
ACCESSION 184206
VERSION 184206.1 GI:3021726
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Paul, P.S., Halbur, P.G., Meng, X.-J., Lyoo, Y.S. and Lum, M. Anne.
TITLE Highly virulent porcine reproductive and respiratory syndrome
viruses which produce lesions in pigs and vaccines that protect
pigs against said syndrome
JOURNAL Patent: US 5695766-A 4 09-DEC-1997;
FEATURES Location/Qualifiers
source
1..20
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 554 CAACTTGACGCTATGTGAGC 573
|||||
1 CAACTTGACGCTATGTGAGC 20

RESULT 57
184207/c
LOCUS 184207
DEFINITION Sequence 5 from patent US 5695766.
ACCESSION 184207
VERSION 184207.1 GI:3021727
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Paul, P.S., Halbur, P.G., Meng, X.-J., Lyoo, Y.S. and Lum, M. Anne.
TITLE Highly virulent porcine reproductive and respiratory syndrome
viruses which produce lesions in pigs and vaccines that protect
pigs against said syndrome
JOURNAL Patent: US 5695766-A 5 09-DEC-1997;
FEATURES Location/Qualifiers
source
1..20
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1752 CTGTGCTCAATCCAGACCGC 1771
|||||
20 CTGTGCTCAATCCAGACCGC 1

RESULT 58
184208
LOCUS 184208
DEFINITION Sequence 6 from patent US 5695766.
ACCESSION 184208
VERSION 184208.1 GI:3021728
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
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Unclassified.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Paul, P.S., Halbur, P.G., Meng, X.-J., Lyoo, Y.S. and Lum, M. Anne.  
TITLE Highly virulent porcine reproductive and respiratory syndrome viruses which produce lesions in pigs and vaccines that protect pigs against said syndrome  
JOURNAL Patent: US 5695766-A 6 09-DEC-1997;  
FEATURES Location/Qualifiers  
source 1..20  
/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 1.0%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 67;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1131 GACTGCTAGGCTTCGCAC 1150  
Db 1 GACTGCTAGGCTTCGCAC 20  
RESULT 59  
I84209/c  
LOCUS 20 bp DNA linear PAT 04-APR-1998  
DEFINITION Sequence 7 from patent US 5695766.  
ACCESSION I84209  
VERSION I84209.1 GI:3021729  
KEYWORDS .  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Paul, P.S., Halbur, P.G., Meng, X.-J., Lyoo, Y.S. and Lum, M. Anne.  
TITLE Highly virulent porcine reproductive and respiratory syndrome viruses which produce lesions in pigs and vaccines that protect pigs against said syndrome  
JOURNAL Patent: US 5695766-A 7 09-DEC-1997;  
FEATURES Location/Qualifiers  
source 1..20  
/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 1.0%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 67;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 562 CGCTATGTGAGCTGAATGCC 581  
Db 20 CGCTATGTGAGCTGAATGCC 1  
RESULT 60  
AR353119/c  
LOCUS 20 bp DNA linear PAT 17-AUG-2003  
DEFINITION Sequence 3 from patent US 6592873.  
ACCESSION AR353119  
VERSION AR353119.1 GI:33758832  
KEYWORDS .  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Paul, P.S., Meng, X.-J., Halbur, P., Morozov, I. and Lum, M. A.  
TITLE Polynucleic acids isolated from a porcine reproductive and respiratory syndrome virus (PRRSV) and proteins encoded by the polynucleic acids  
JOURNAL Patent: US 6592873-A 3 15-JUL-2003;  
FEATURES Location/Qualifiers  
source 1..20  
/organism="unknown"  
/mol\_type="genomic DNA"  
Query Match 1.0%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 67;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 963 GTGCTTGATGCTTCGCGGC 982  
Db 20 GTGCTTGATGCTTCGCGGC 1  
RESULT 61  
AR353120  
LOCUS 20 bp DNA linear PAT 17-AUG-2003  
DEFINITION Sequence 4 from patent US 6592873.  
ACCESSION AR353120  
VERSION AR353120.1 GI:33758833  
KEYWORDS .  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Paul, P.S., Meng, X.-J., Halbur, P., Morozov, I. and Lum, M. A.  
TITLE Polynucleic acids isolated from a porcine reproductive and respiratory syndrome virus (PRRSV) and proteins encoded by the polynucleic acids  
JOURNAL Patent: US 6592873-A 4 15-JUL-2003;  
FEATURES Location/Qualifiers  
source 1..20  
/organism="unknown"  
/mol\_type="genomic DNA"  
Query Match 1.0%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 67;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 554 CCACTTGACGCTATGTGAGC 573  
Db 1 CCACTTGACGCTATGTGAGC 20  
RESULT 62  
AR353121/c  
LOCUS 20 bp DNA linear PAT 17-AUG-2003  
DEFINITION Sequence 5 from patent US 6592873.  
ACCESSION AR353121  
VERSION AR353121.1 GI:33758834  
KEYWORDS .  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Paul, P.S., Meng, X.-J., Halbur, P., Morozov, I. and Lum, M. A.  
TITLE Polynucleic acids isolated from a porcine reproductive and respiratory syndrome virus (PRRSV) and proteins encoded by the polynucleic acids  
JOURNAL Patent: US 6592873-A 5 15-JUL-2003;  
FEATURES Location/Qualifiers  
source 1..20  
/organism="unknown"  
/mol\_type="genomic DNA"  
Query Match 1.0%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 67;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1752 CTGTGCTCAATCCAGACCGC 1771  
Db 20 CTGTGCTCAATCCAGACCGC 1  
RESULT 63  
AR353122  
LOCUS 20 bp DNA linear PAT 17-AUG-2003  
DEFINITION Sequence 6 from patent US 6592873.  
ACCESSION AR353122



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VERSION AR353122.1 GI:33758835
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Paul,P.S., Meng,X.-J., Halbur,P., Morozov,I. and Lum,M.A.
TITLE Polynucleic acids isolated from a porcine reproductive and
respiratory syndrome virus (PRRSV) and proteins encoded by the
polynucleic acids
JOURNAL Patent: US 6592873-A 6 15-JUL-2003;
FEATURES Location/Qualifiers
source
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/organism="unknown"
/mol_type="genomic DNA"

Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1131 GACTGTAGGGCTTCTGCAC 1150
|||||
Db 1 GACTGTAGGGCTTCTGCAC 20

RESULT 64
AR353123/c
LOCUS AR353123 20 bp DNA linear PAT 17-AUG-2003
DEFINITION Sequence 7 from patent US 6592873.
ACCESSION AR353123
VERSION AR353123.1 GI:33758836
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Paul,P.S., Meng,X.-J., Halbur,P., Morozov,I. and Lum,M.A.
TITLE Polynucleic acids isolated from a porcine reproductive and
respiratory syndrome virus (PRRSV) and proteins encoded by the
polynucleic acids
JOURNAL Patent: US 6592873-A 7 15-JUL-2003;
FEATURES Location/Qualifiers
source
1..20
/organism="unknown"
/mol_type="genomic DNA"

Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 562 CGCTATGTGAGCTGAATGGC 581
|||||
Db 20 CGCTATGTGAGCTGAATGGC 1

RESULT 65
AR353123/c
LOCUS AR353123 25 bp DNA linear PAT 14-DEC-2001
DEFINITION Sequence 26 from Patent WO0190363.
ACCESSION AR353123
VERSION AR353123.1 GI:17899326
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Verheije,M.H. and Meulenbergh,J.J.
TITLE Chimeric arterivirus-like particles
JOURNAL Patent: WO 0190363-A 26 29-NOV-2001;
ID-Lelystad, Instituut voor Dierhouderij en Diergezondheid B.V.
(NL)
FEATURES Location/Qualifiers
source
1..25
/organism="synthetic construct"
/mol_type="unassigned DNA"

Query Match 0.9%; Score 19.2; DB 1; Length 25;
Best Local Similarity 87.5%; Pred. No. 1.1e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 557 CTTGACGCTATGTGAGCTGAATGG 580
|||||
Db 1 CTTGACGATATCAGAGCTGAATGG 24

RESULT 66
AR353123/c
LOCUS AR353123 25 bp DNA linear PAT 14-DEC-2001
DEFINITION Sequence 27 from Patent WO0190363.
ACCESSION AR353123
VERSION AR353123.1 GI:17899327
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Verheije,M.H. and Meulenbergh,J.J.
TITLE Chimeric arterivirus-like particles
JOURNAL Patent: WO 0190363-A 27 29-NOV-2001;
ID-Lelystad, Instituut voor Dierhouderij en Diergezondheid B.V.
(NL)
FEATURES Location/Qualifiers
source
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/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/notes="primer LV303"

Query Match 0.9%; Score 19.2; DB 1; Length 25;
Best Local Similarity 87.5%; Pred. No. 1.1e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 557 CTTGACGCTATGTGAGCTGAATGG 580
|||||
Db 25 CTTGACGATATCAGAGCTGAATGG 2

RESULT 67
AR093192
LOCUS AR093192 19 bp DNA linear PAT 08-SEP-2000
DEFINITION Sequence 31 from patent US 5998601.
ACCESSION AR093192
VERSION AR093192.1 GI:10019943
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 19)
AUTHORS Murtaugh,M.P., Elam,M.R. and Kakach,L.T.
TITLE VR-2332 viral nucleotide sequence and methods of use
JOURNAL Patent: US 5998601-A 31 07-DEC-1999;
FEATURES Location/Qualifiers
source
1..19
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 0.9%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 81;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1493 GCTGTTAAACAGGAGTGG 1511
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Db 1 GCTGTTAAACAGGAGTGG 19
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VERSION AR353122.1 GI:33758835
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Paul,P.S., Meng,X.-J., Halbur,P., Morozov,I. and Lum,M.A.
TITLE Polynucleic acids isolated from a porcine reproductive and
respiratory syndrome virus (PRRSV) and proteins encoded by the
polynucleic acids
JOURNAL Patent: US 6592873-A 6 15-JUL-2003;
FEATURES Location/Qualifiers
source
1..20
/organism="unknown"
/mol_type="genomic DNA"

Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1131 GACTGTAGGGCTTCTGCAC 1150
|||||
Db 1 GACTGTAGGGCTTCTGCAC 20

RESULT 64
AR353123/c
LOCUS AR353123 20 bp DNA linear PAT 17-AUG-2003
DEFINITION Sequence 7 from patent US 6592873.
ACCESSION AR353123
VERSION AR353123.1 GI:33758836
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Paul,P.S., Meng,X.-J., Halbur,P., Morozov,I. and Lum,M.A.
TITLE Polynucleic acids isolated from a porcine reproductive and
respiratory syndrome virus (PRRSV) and proteins encoded by the
polynucleic acids
JOURNAL Patent: US 6592873-A 7 15-JUL-2003;
FEATURES Location/Qualifiers
source
1..20
/organism="unknown"
/mol_type="genomic DNA"

Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 67;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 562 CGCTATGTGAGCTGAATGGC 581
|||||
Db 20 CGCTATGTGAGCTGAATGGC 1

RESULT 65
AR353123/c
LOCUS AR353123 25 bp DNA linear PAT 14-DEC-2001
DEFINITION Sequence 26 from Patent WO0190363.
ACCESSION AR353123
VERSION AR353123.1 GI:17899326
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Verheije,M.H. and Meulenbergh,J.J.
TITLE Chimeric arterivirus-like particles
JOURNAL Patent: WO 0190363-A 26 29-NOV-2001;
ID-Lelystad, Instituut voor Dierhouderij en Diergezondheid B.V.
(NL)
FEATURES Location/Qualifiers
source
1..25
/organism="synthetic construct"
/mol_type="unassigned DNA"

Query Match 0.9%; Score 19.2; DB 1; Length 25;
Best Local Similarity 87.5%; Pred. No. 1.1e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 557 CTTGACGCTATGTGAGCTGAATGG 580
|||||
Db 1 CTTGACGATATCAGAGCTGAATGG 24

RESULT 66
AR353123/c
LOCUS AR353123 25 bp DNA linear PAT 14-DEC-2001
DEFINITION Sequence 27 from Patent WO0190363.
ACCESSION AR353123
VERSION AR353123.1 GI:17899327
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Verheije,M.H. and Meulenbergh,J.J.
TITLE Chimeric arterivirus-like particles
JOURNAL Patent: WO 0190363-A 27 29-NOV-2001;
ID-Lelystad, Instituut voor Dierhouderij en Diergezondheid B.V.
(NL)
FEATURES Location/Qualifiers
source
1..25
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/notes="primer LV303"

Query Match 0.9%; Score 19.2; DB 1; Length 25;
Best Local Similarity 87.5%; Pred. No. 1.1e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 557 CTTGACGCTATGTGAGCTGAATGG 580
|||||
Db 25 CTTGACGATATCAGAGCTGAATGG 2

RESULT 67
AR093192
LOCUS AR093192 19 bp DNA linear PAT 08-SEP-2000
DEFINITION Sequence 31 from patent US 5998601.
ACCESSION AR093192
VERSION AR093192.1 GI:10019943
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 19)
AUTHORS Murtaugh,M.P., Elam,M.R. and Kakach,L.T.
TITLE VR-2332 viral nucleotide sequence and methods of use
JOURNAL Patent: US 5998601-A 31 07-DEC-1999;
FEATURES Location/Qualifiers
source
1..19
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 0.9%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 81;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1493 GCTGTTAAACAGGAGTGG 1511
|||||
Db 1 GCTGTTAAACAGGAGTGG 19
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RESULT 68 AR0931193 LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM	AR0931193 Sequence 32 from patent US 5998601. AR0931193.1 GI:10019944 Unknown. Unclassified. 1 (bases 1 to 19) Murtaugh,M.P., Elam,M.R. and Kakach,L.T. VR-2332 viral nucleotide sequence and methods of use Patent: US 5998601-A 32 07-DEC-1999; JOURNAL FEATURES source	19 bp DNA linear PAT 08-SEP-2000	IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC,AMERICAN CYANAMID CO OS Artificial Sequence PN JP 2002504317-A/20 PD 12-FEB-2002 PF 08-FEB-1999 JP 2000530103 PR 06-FEB-1998 US 09/019793 PI PREM S PAUL,YANJIN ZHANG PC C12N15/09,A61K39/12,A61P31/14,C07K14/08,C12Q1/68//C07K16/10, C12N15/00 CC Description of Artificial Sequence:Synthetic DNA FH Key FT Location/Qualifiers source 1..25 FT /organism='Artificial Sequence'. FT Location/Qualifiers 1..25 /organism="synthetic construct" /mol_type="genomic DNA" /db_xref="taxon:32630"	Query Match 0.9%; Score 19; DB 1; Length 25; Best Local Similarity 100.0%; Pred. No. 1.2e+02; Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	1981 GTCACCTATTCAATTAGG 1999 			
Db	1 GTCACCTATTCAATTAGG 19			
RESULT 69 AR0931194/c LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM	AR0931194 Sequence 33 from patent US 5998601. AR0931194 AR0931194.1 GI:10019945 Unknown. Unknown. Unclassified. 1 (bases 1 to 19) Murtaugh,M.P., Elam,M.R. and Kakach,L.T. VR-2332 viral nucleotide sequence and methods of use Patent: US 5998601-A 33 07-DEC-1999; JOURNAL FEATURES source	19 bp DNA linear PAT 08-SEP-2000	IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC,AMERICAN CYANAMID CO OS Porcine reproductive and respiratory syndrome virus (PRRSV) PD 12-FEB-2002 PF 08-FEB-1999 JP 2000530103 PR 06-FEB-1998 US 09/019793 PI PREM S PAUL,YANJIN ZHANG PC C12N15/09,A61K39/12,A61P31/14,C07K14/08,C12Q1/68//C07K16/10, C12N15/00 CC Description of Artificial Sequence:Synthetic DNA FH Key FT Location/Qualifiers source 1..20 FT /organism='Porcine reproductive and respiratory syndrome virus' FT Location/Qualifiers 1..20 /organism="Porcine reproductive and respiratory syndrome virus" /mol_type="genomic DNA" /db_xref="taxon:28344"	Query Match 0.9%; Score 19; DB 1; Length 19; Best Local Similarity 100.0%; Pred. No. 81; Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	1981 GTCACCTATTCAATTAGG 1999 			
Db	1 GTCACCTATTCAATTAGG 19			
RESULT 70 BD137735/c LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM	BD137735 Protein encoded by polynucleic acid of porcine reproductive and respiratory syndrome virus (PRRSV). BD137735.1 GI:23232680 JP 2002504317-A/20. synthetic construct synthetic construct other sequences: artificial sequences. 1 (bases 1 to 25) Paul,P.S. and Zhang,Y. Protein encoded by polynucleic acid of porcine reproductive and respiratory syndrome virus (PRRSV) Patent: JP 2002504317-A 20 12-FEB-2002; JOURNAL	25 bp DNA linear PAT 18-SEP-2002	IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC,AMERICAN CYANAMID CO OS Porcine reproductive and respiratory syndrome virus PN JP PD 12-FEB-2002 PF 08-FEB-1999 JP 2000530103 PR 06-FEB-1998 US 09/019793 PI PREM S PAUL,YANJIN ZHANG PC C12N15/09,A61K39/12,A61P31/14,C07K14/08,C12Q1/68//C07K16/10, C12N15/00 CC Description of Artificial Sequence:Synthetic DNA FH Key FT Location/Qualifiers source 1..20 FT /organism='Porcine reproductive and respiratory syndrome virus' FT Location/Qualifiers 1..20 /organism="Porcine reproductive and respiratory syndrome virus" /mol_type="genomic DNA" /db_xref="taxon:28344"	Query Match 0.9%; Score 18.4; DB 1; Length 20; Best Local Similarity 95.0%; Pred. No. 1e+02; Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY	86 CGCAGCGGATAGGACACC 105 			

Db 1 CGTACGGCGATAGGCACACC 20

RESULT 72  
LOCUS BD137833 20 bp DNA linear PAT 18-SEP-2002  
DEFINITION Protein encoded by polynucleic acid of porcine reproductive and  
respiratory syndrome virus (PRRSV).  
ACCESSION BD137833  
VERSION BD137833.1 GI:23232778  
KEYWORDS JP 2002504317-A/118.  
SOURCE synthetic construct  
ORGANISM synthetic construct  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Paul, P.S. and Zhang, Y.  
TITLE Protein encoded by polynucleic acid of porcine reproductive and  
respiratory syndrome virus (PRRSV)  
JOURNAL Patent: JP 2002504317-A 118 12-FEB-2002;  
IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC, AMERICAN CYANAMID CO  
COMMENT OS Artificial Sequence  
PN JP 2002504317-A/118  
PD 12-FEB-2002  
PF 08-FEB-1999 JP 2000530103  
PR 06-FEB-1998 US 09/019793  
PI PREM S PAUL, YANJIN ZHANG  
PC C12N15/09, A61K39/12, A61P31/14, C07K14/08, C12Q1/68//C07K16/10,  
PC C12N15/00  
CC Description of Artificial Sequence: Synthetic DNA FH Key  
FT Location/Qualifiers  
FT source 1..20  
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source  
1..20  
Location/Qualifiers  
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/organism='synthetic construct'  
/mol\_type='genomic DNA'  
/db\_xref='taxon:32630'

Query Match 0.9%; Score 18.4; DB 1; Length 20;  
Best Local Similarity 95.0%; Pred. No. 1e+02;  
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 86 CGACGGCGATAGGCACACC 105

Db 1 CGTACGGCGATAGGCACACC 20

RESULT 73  
LOCUS AR158114/c 18 bp DNA linear PAT 17-OCT-2001  
DEFINITION Sequence 74 from patent US 6251397.  
ACCESSION AR158114  
VERSION AR158114.1 GI:16220120  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Paul, P.S., Meng, X.-J., Halbur, P. and Morozov, I.  
TITLE Proteins encoded by polynucleic acids isolated from a porcine  
reproductive and respiratory syndrome virus and immunogenic  
compositions containing the same  
JOURNAL Patent: US 6251397-A 74 26-JUN-2001;  
FEATURES  
source  
1..18  
Location/Qualifiers  
/organism='unknown'  
/mol\_type='unassigned DNA'

Query Match 0.9%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 98;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 868 CTAAGGCGAGCTCTATC 885

Db 18 CTAAGGCGAGCTCTATC 1

RESULT 74  
LOCUS AR158125 18 bp DNA linear PAT 17-OCT-2001  
DEFINITION Sequence 85 from patent US 6251397.  
ACCESSION AR158125  
VERSION AR158125.1 GI:16220132  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Paul, P.S., Meng, X.-J., Halbur, P. and Morozov, I.  
TITLE Proteins encoded by polynucleic acids isolated from a porcine  
reproductive and respiratory syndrome virus and immunogenic  
compositions containing the same  
JOURNAL Patent: US 6251397-A 85 26-JUN-2001;  
FEATURES  
source  
1..18  
Location/Qualifiers  
/organism='unknown'  
/mol\_type='unassigned DNA'

Query Match 0.9%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 98;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 110 TATATCACTGTCTACAGCC 127

Db 1 TATATCACTGTCTACAGCC 18

RESULT 75  
LOCUS AR158126/c 18 bp DNA linear PAT 17-OCT-2001  
DEFINITION Sequence 86 from patent US 6251397.  
ACCESSION AR158126  
VERSION AR158126.1 GI:16220133  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Paul, P.S., Meng, X.-J., Halbur, P. and Morozov, I.  
TITLE Proteins encoded by polynucleic acids isolated from a porcine  
reproductive and respiratory syndrome virus and immunogenic  
compositions containing the same  
JOURNAL Patent: US 6251397-A 86 26-JUN-2001;  
FEATURES  
source  
1..18  
Location/Qualifiers  
/organism='unknown'  
/mol\_type='unassigned DNA'

Query Match 0.9%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 98;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 397 CATTCTGTTGGCAATTG 414

Db 18 CATTCTGTTGGCAATTG 1

RESULT 76  
LOCUS AR158130/c 18 bp DNA linear PAT 17-OCT-2001  
DEFINITION Sequence 90 from patent US 6251397.  
ACCESSION AR158130  
VERSION AR158130.1 GI:16220137  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.

REFERENCE AUTHORS TITLE JOURNAL FEATURES	Unclassified. 1 (bases 1 to 18) Paul,P.S., Meng,X.-J., Halbur,P. and Morozov,I. Proteins encoded by polynucleic acids isolated from a porcine reproductive and respiratory syndrome virus and immunogenic compositions containing the same Patent: US 6251397-A 90 26-JUN-2001;									
	Location/Qualifiers									
	1..18									
	/organism="unknown"									
	/mol_type="unassigned DNA"									
	0.9%; Score 18; DB 1; Length 18;									
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	Best Local Similarity 100.0%; Pred. No. 98;									
	Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;									
QY Db	1428 GCTCCACTACGGTCAACG 1445									
	18 GTCCTCACTACGGTCAACG 1									
RESULT 77 AR158134/c LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM	AR158134									
	Sequence 94 from patent US 6251397.									
	AR158134									
	AR158134.1 GI:16220142									
	Unknown.									
	Unknown.									
	Unclassified.									
	1 (bases 1 to 18)									
	Paul,P.S., Meng,X.-J., Halbur,P. and Morozov,I. Proteins encoded by polynucleic acids isolated from a porcine reproductive and respiratory syndrome virus and immunogenic compositions containing the same Patent: US 6251397-A 94 26-JUN-2001;									
	Location/Qualifiers									
FEATURES source	1..18									
	/organism="unknown"									
	/mol_type="unassigned DNA"									
	0.9%; Score 18; DB 1; Length 18;									
	Query Match									
	Best Local Similarity 100.0%; Pred. No. 98;									
	Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;									
REFERENCE AUTHORS TITLE JOURNAL FEATURES	18 bp DNA linear PAT 17-OCT-2001									
	AR158134									
	Sequence 94 from patent US 6251397.									
	AR158134									
	AR158134.1 GI:16220142									
	Unknown.									
	Unknown.									
	Unclassified.									
	1 (bases 1 to 18)									
	Paul,P.S., Meng,X.-J., Halbur,P. and Morozov,I. Proteins encoded by polynucleic acids isolated from a porcine reproductive and respiratory syndrome virus and immunogenic compositions containing the same Patent: US 6251397-A 94 26-JUN-2001;									
QY Db	233 GGCAATGTGTCAGGCATC 250									
	18 GGCAATGTGTCAGGCATC 1									
RESULT 78 BD137773/c LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM	BD137773									
	Protein encoded by polynucleic acid of porcine reproductive and respiratory syndrome virus (PRRSV).									
	BD137773									
	BD137773.1 GI:23232718									
	JP 2002504317-A/58.									
	synthetic construct									
	other sequences; artificial sequences.									
	1 (bases 1 to 18)									
	Paul,P.S. and Zhang,Y. Protein encoded by polynucleic acid of porcine reproductive and respiratory syndrome virus (PRRSV) Patent: JP 2002504317-A 58 12-FEB-2002;									
	IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC,AMERICAN CYANAMID CO									
COMMENT OS PN PR PI PC CC	OS Artificial Sequence									
	PN 12-FEB-2002									
	PR 06-FEB-1999 JP 2000530103									
	PI PREM S PAUL,YANJIIN ZHANG									
	PC C12N15/09,A61K39/12,A61P31/14,C07K14/08,C12Q1/68//C07K16/10,									
	C12N15/00									
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	Location/Qualifiers									
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	/mol_type="genomic DNA"									
	/db_xref="taxon:32630"									
	0.9%; Score 18; DB 1; Length 18;									
	Query Match									
	Best Local Similarity 100.0%; Pred. No. 98;									
	Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;									
QY Db	110 TATATCACTGTCCACGCC 127									
	1 TATATCACTGTCCACGCC 18									
RESULT 80 BD137785/c LOCUS DEFINITION ACCESSION VERSION	BD137785									
	Protein encoded by polynucleic acid of porcine reproductive and respiratory syndrome virus (PRRSV).									
	BD137785									
	BD137785.1 GI:23232730									
	Unknown.									
	Unknown.									
	Unclassified.									
	1 (bases 1 to 18)									
	Paul,P.S. and Zhang									

[illegible]

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PR 06-FEB-1998 US 09/019793
PI PREM S PAUL,YANJIN ZHANG
PC C12N15/09,A61K39/12,A61P31/14,C07K14/08,C12Q1/68//C07K16/10,
PC C12N15/00
CC Description of Artificial Sequence:Synthetic DNA FH Key
Location/Qualifiers
FT source 1..18
FT Location/Qualifiers
source 1..18
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

Query Match 0.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 98;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 233 GGCAATGTGTCCAGGCATC 250
Db 18 GGCAATGTGTCCAGGCATC 1

RESULT 84
AX328130/c
LOCUS AX328130 21 bp DNA linear PAT 07-JAN-2002
DEFINITION Sequence 6 from Patent WO0189559.
ACCESSION AX328130
VERSION AX328130.1 GI:18098173
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Audonnet,J.C., Bublout,M.J., Perez,J.M. and Baudu,P.G.
TITLE Porcine reproductive and respiratory syndrome virus (prsv)
recombinant poxvirus vaccine
JOURNAL Patent: WO 0189559-A 6 29-NOV-2001;
MERRAL (FR)

FEATURES
source 1..21
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="oligonucleotide"

Query Match 0.9%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 1.3e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 172 GCTTCTCTTCTGCTTTTCTA 192
Db 21 GCTTCTGCTGCTTTTCTA 1

RESULT 85
E49331/c
LOCUS E49331 19 bp DNA linear PAT 31-JAN-2002
DEFINITION Infectious cDNA clone of North American porcine reproductive and
respiratory syndrome (PRRS) virus and use thereof.
ACCESSION E49331
VERSION E49331.1 GI:18628062
KEYWORDS JP 2000189178-A/40.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 19)
AUTHORS Calvert,J.G., George,M. and Welsh,S.H.
TITLE Infectious cDNA clone of North American porcine reproductive and
respiratory syndrome (PRRS) virus and use thereof
JOURNAL Patent: JP 2000189178-A 40 11-JUL-2000;
PFIZER PROD INC
COMMENT OS Artificial Sequence
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PN JP 2000189178-A/40
PD 11-JUL-2000
PF 21-DEC-1999 JP 1999362186
PR 22-DEC-1998 US 60/113345
PI J GUREGORI CALVERT,MICHAEL GEORGE,SHAKUN HWANG WELSHU PC
C12N15/09,A61K39/12,A61K48/00,A61P31/12,C12N1/15,C12N1/19, PC
C12N1/21,
PC C12N5/10,C12N15/00,C12N5/00
CC Key Location/Qualifiers
FH Key source 1..19
FT source /organism='Artificial Sequence'.
FT Location/Qualifiers
source 1..19
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

Query Match 0.8%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 1.2e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1635 AGAGGCAAGGACCGGGA 1653
Db 19 AGAGGCAAGGACCGGGA 1

RESULT 86
AR269189/c
LOCUS AR269189 19 bp DNA linear PAT 10-APR-2003
DEFINITION Sequence 40 from patent US 6500662.
ACCESSION AR269189
VERSION AR269189.1 GI:29700131
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 19)
AUTHORS Calvert,J.G., Sheppard,M.G. and Welch,S.-K.W.
TITLE Infectious cDNA clone of North American porcine reproductive and
respiratory syndrome (PRRS) virus and uses thereof
JOURNAL Patent: US 6500662-A 40 31-DEC-2002;
Location/Qualifiers
FEATURES source 1..19
/organism="unknown"
/mol_type="genomic DNA"

Query Match 0.8%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 1.2e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1635 AGAGGCAAGGACCGGGA 1653
Db 19 AGAGGCAAGGACCGGGA 1

RESULT 87
BD015914/c
LOCUS BD015914 19 bp DNA linear PAT 27-AUG-2002
DEFINITION Infectious cDNA clone of North American porcine reproductive and
respiratory syndrome (PRRS) virus and use thereof.
ACCESSION BD015914
VERSION BD015914.1 GI:22557051
KEYWORDS JP 2001218591-A/40.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 19)
AUTHORS Calvert,J.G., Sheppard,M.G. and Welsh,S.K.W.
TITLE Infectious cDNA clone of North American porcine reproductive and
respiratory syndrome (PRRS) virus and use thereof
JOURNAL Patent: JP 2001218591-A 40 14-AUG-2001;
PFIZER PRODUCTS INC
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COMMENT      OS      Artificial Sequence
PN      JP 2001218591-A/40
PD      14-AUG-2001
PF      06-DEC-2000 JP 2000372096
PR      22-DEC-1998 US 60/113345
PI      J GREGORY CALVERT, MICHAEL GEORGE SHEPHERD, SHAO KUN WAN WELSH
PC      C12N15/09,A61K35/76,A61K39/12,A61K48/00,A61P31/14,C07H21/02,
PC      C12N5/10,
PC      C12N7/00,C12N7/04,G01N33/15,G01N33/50,G01N33/569/(C12N5/10,
PC      C12R1:91),
PC      (C12N7/00,C12R1:93),C12N15/00,C12N5/00,(C12N5/00,C12R1:91) CC
Description of Artificial Sequence: Primer, reverse, used for CC
synthesizing
CC      downstream flanking region to ORF4
FH      key
FT      source
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source      Location/Qualifiers
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/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

Query Match      0.8%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 1.2e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1635 AGAGGCAAGGACCGGAA 1653
DB      19 AGAGGCAAGGACCGGCA 1

RESULT 88
LOCUS      BD016282/c      19 bp      DNA      linear      PAT 27-AUG-2002
DEFINITION      Infectious cDNA clone of North American porcine reproductive and
VERSION      BD016282.1 GI:22557420
KEYWORDS      JP 2001224384-A/40.
SOURCE      synthetic construct
ORGANISM      other sequences; artificial sequences.
REFERENCE      1 (bases 1 to 19)
AUTHORS      Calvart,J.G., Sheppard,M.G. and Welch,S.K.W.
TITLE      Infectious cDNA clone of North American porcine reproductive and
respiratory syndrome (PRRS) virus and utilization thereof
JOURNAL      Patent: JP 2001224384-A 40 21-AUG-2001;
PFIZER PRODUCTS INC
COMMENT      OS      Artificial Sequence
PN      JP 2001224384-A/40
PD      21-AUG-2001
PF      06-DEC-2000 JP 2000372087
PR      22-DEC-1998 US 60/113345
PI      JAY GREGORY CALVART, MICHAEL GEORGE SHEPHERD, SHAO KUN WAN WELCH
PC      C12N15/09,A61K39/12,A61P11/00,A61P15/00,A61P31/14,C12N1/15, PC
C12N1/19,
PC      C12N1/21,C12N5/10,C12N7/00,G01N33/15,G01N33/50,G01N33/569// PC
C07K14/08,
PC      C12P21/02,(C12N15/09,C12R1:93),(C12N7/00,C12R1:93),C12N15/00,
PC      C12N5/00,
PC      (C12N15/00,C12R1:93)
CC      Description of Artificial Sequence: Primer, reverse, used for
synthesizing
CC      downstream flanking region to ORF4
FH      key
FT      source
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source      Location/Qualifiers
1..19
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

OS      Artificial Sequence
PN      JP 2000372096
PD      22-DEC-1998 US 60/113345
PI      J GREGORY CALVERT, MICHAEL GEORGE SHEPHERD, SHAO KUN WAN WELSH
PC      C12N15/09,A61K35/76,A61K39/12,A61K48/00,A61P31/14,C07H21/02,
PC      C12N5/10,
PC      C12N7/00,C12N7/04,G01N33/15,G01N33/50,G01N33/569/(C12N5/10,
PC      C12R1:91),
PC      (C12N7/00,C12R1:93),C12N15/00,C12N5/00,(C12N5/00,C12R1:91) CC
Description of Artificial Sequence: Primer, reverse, used for CC
synthesizing
CC      downstream flanking region to ORF4
FH      key
FT      source
FEATURES
source      Location/Qualifiers
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/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

Query Match      0.8%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 1.2e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1635 AGAGGCAAGGACCGGAA 1653
DB      19 AGAGGCAAGGACCGGCA 1

RESULT 89
LOCUS      AR107538      22 bp      DNA      linear      PAT 14-FEB-2001
DEFINITION      Sequence 27 from patent US 6110467.
VERSION      AR107538
KEYWORDS      AR107538.1 GI:12823025
SOURCE      Unknown.
ORGANISM      Unknown.
REFERENCE      1 (bases 1 to 22)
AUTHORS      Paul,P.S., Halbur,P.G., Meng,X.-J., Lyoo,Y.S. and Lum,M.Anne.
TITLE      Isolated porcine respiratory and reproductive virus vaccines and
methods of protecting a pig against a disease caused by a porcine
respiratory and reproductive virus
JOURNAL      Patent: US 6110467-A 27 29-AUG-2000;
FEATURES
source      Location/Qualifiers
1..22
/organism="unknown"
/mol_type="unassigned DNA"

Query Match      0.8%; Score 17.2; DB 1; Length 22;
Best Local Similarity 86.4%; Pred. No. 1.6e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      1510 GGTAAACCTTGTAAATATGCC 1531
DB      1 GGGGATCCTTGTAAATATGCC 22

RESULT 90
LOCUS      AR158337      22 bp      DNA      linear      PAT 17-OCT-2001
DEFINITION      Sequence 27 from patent US 6251404.
VERSION      AR158337
KEYWORDS      AR158337.1 GI:16220357
SOURCE      Unknown.
ORGANISM      Unknown.
REFERENCE      1 (bases 1 to 22)
AUTHORS      Paul,P.S., Halbur,P.G., Meng,X.-J., Lyoo,Y.S. and Lum,M.Anne.
TITLE      Method of producing a vaccine which raises an immunological
response against a virus causing a porcine respiratory and
reproductive disease
JOURNAL      Patent: US 6251404-A 27 26-JUN-2001;
FEATURES
source      Location/Qualifiers
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/organism="unknown"
/mol_type="unassigned DNA"

Query Match      0.8%; Score 17.2; DB 1; Length 22;
Best Local Similarity 86.4%; Pred. No. 1.6e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      1510 GGTAAACCTTGTAAATATGCC 1531
DB      1 GGGGATCCTTGTAAATATGCC 22

RESULT 91
LOCUS      BD137730      22 bp      DNA      linear      PAT 18-SEP-2002

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DEFINITION Protein encoded by polynucleic acid of porcine reproductive and
respiratory syndrome virus (PRRSV).
ACCESSION BD137730
VERSION BD137730.1 GI:23232675
KEYWORDS JP 2002504317-A/15.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 22)
AUTHORS Paul, P.S. and Zhang, Y.
TITLE Protein encoded by polynucleic acid of porcine reproductive and
respiratory syndrome virus (PRRSV)
JOURNAL Patent: JP 2002504317-A 15 12-FEB-2002;
IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC, AMERICAN CYANAMID CO
COMMENT OS Artificial Sequence
PN JP 2002504317-A/15
PD 12-FEB-2002
PF 08-FEB-1999 JP 2000530103
PR 06-FEB-1998 US 09/019793
PI PREM S PAUL, YANJIN ZHANG
PC C12N15/09, A61K39/12, A61P31/14, C07K14/08, C12Q1/68//C07K16/10,
CC C12N15/00
CC Description of Artificial Sequence: Synthetic DNA FH Key
FT Location/Qualifiers
FT source 1..22
FT /organism='Artificial Sequence'.

FEATURES
source
Location/Qualifiers
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/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

Query Match 0.8%; Score 17.2; DB 1; Length 22;
Best Local Similarity 86.4%; Pred. No. 1.6e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1510 GGTAACCTTGTTAAATATGCC 1531
Db 1 GGGATCCTTGTTAAATATGCC 22

RESULT 92
184228
LOCUS 22 bp DNA linear PAT 04-APR-1998
DEFINITION Sequence 30 from patent US 5695766.
ACCESSION 184228
VERSION 184228.1 GI:3021748
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 22)
AUTHORS Paul, P.S., Halbur, P.G., Meng, X.-J., Lyoo, Y.S. and Lum, M. Anne.
TITLE Highly virulent porcine reproductive and respiratory syndrome
viruses which produce lesions in pigs and vaccines that protect
pigs against said syndrome
JOURNAL Patent: US 5695766-A 30 09-DEC-1997;
FEATURES
source
Location/Qualifiers
1..22
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 0.8%; Score 17.2; DB 1; Length 22;
Best Local Similarity 86.4%; Pred. No. 1.6e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1510 GGTAACCTTGTTAAATATGCC 1531
Db 1 GGGATCCTTGTTAAATATGCC 22

RESULT 93
AR233545/c
DEFINITION Protein encoded by polynucleic acid of porcine reproductive and
respiratory syndrome virus (PRRSV).
ACCESSION AR233545
VERSION AR233545.1 GI:27276136
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 22)
AUTHORS Detera-Wadleigh, S.D., Yoshikawa, T., Sanders, A.R. and Esterling, L.E.
TITLE Polynucleotides encoding IMP.1bp myo-inositol monophosphatase and
methods of detecting said polynucleotides
JOURNAL Patent: US 6458532-A 174 01-OCT-2002;
FEATURES
source
Location/Qualifiers
1..22
/organism="unknown"
/mol_type="genomic DNA"

Query Match 0.8%; Score 17.2; DB 1; Length 22;
Best Local Similarity 86.4%; Pred. No. 1.6e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 558 TTGAGCGCTATGTGAGCTGAATG 579
Db 22 TAGACTCTATGTGTGCTGAATG 1

RESULT 94
AR353142
LOCUS 22 bp DNA linear PAT 17-AUG-2003
DEFINITION Sequence 32 from patent US 6592873.
ACCESSION AR353142
VERSION AR353142.1 GI:33758855
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 22)
AUTHORS Paul, P.S., Meng, X.-J., Halbur, P., Morozov, I. and Lum, M.A.
TITLE Polynucleic acids isolated from a porcine reproductive and
respiratory syndrome virus (PRRSV) and proteins encoded by the
polynucleic acids
JOURNAL Patent: US 6592873-A 32 15-JUL-2003;
FEATURES
source
Location/Qualifiers
1..22
/organism="unknown"
/mol_type="genomic DNA"

Query Match 0.8%; Score 17.2; DB 1; Length 22;
Best Local Similarity 86.4%; Pred. No. 1.6e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1510 GGTAACCTTGTTAAATATGCC 1531
Db 1 GGGATCCTTGTTAAATATGCC 22

RESULT 95
AR158116
LOCUS 17 bp DNA linear PAT 17-OCT-2001
DEFINITION Sequence 76 from patent US 6251397.
ACCESSION AR158116
VERSION AR158116.1 GI:16220122
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 17)
AUTHORS Paul, P.S., Meng, X.-J., Halbur, P. and Morozov, I.
TITLE Proteins encoded by polynucleic acids isolated from a porcine
reproductive and respiratory syndrome virus and immunogenic
compositions containing the same
JOURNAL Patent: US 6251397-A 76 26-JUN-2001;
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FEATURES
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    Location/Qualifiers
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        /organism="unknown"
        /mol_type="unassigned DNA"

Query Match
  Best Local Similarity 0.8%; Score 17; DB 1; Length 17;
  Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 194 GCTTCTGAGATGAGTGA 210
Db 1 GCTTCTGAGATGAGTGA 17

RESULT 96
LOCUS BD137775 17 bp DNA linear PAT 18-SEP-2002
DEFINITION Protein encoded by polynucleic acid of porcine reproductive and
respiratory syndrome virus (PRRSV).
ACCESSION BD137775
VERSION BD137775.1 GI:23232720
KEYWORDS JP 2002504317-A/60.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 17)
AUTHORS Paul,P.S. and Zhang,Y.
TITLE Protein encoded by polynucleic acid of porcine reproductive and
respiratory syndrome virus (PRRSV)
JOURNAL Patent: JP 2002504317-A 60 12-FEB-2002;
COMMENT IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC,AMERICAN CYANAMID CO
OS Artificial Sequence
PN JP 2002504317-A/60
PD 12-FEB-2002
PR 08-FEB-1999 JP 2000530103
PR 06-FEB-1998 US 05/019793
PI PREM S PAUL,YANJIN ZHANG
PC C12N15/09,A61K39/12,A61P31/14,C07K14/08,C12Q1/68//C07K16/10,
PC C12N15/00
CC Description of Artificial Sequence:Synthetic DNA FH Key
FT source
FT 1..17
/organism='Artificial Sequence'.

FEATURES
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    Location/Qualifiers
      1..17
        /organism="synthetic construct"
        /mol_type="genomic DNA"
        /db_xref="taxon:32630"

Query Match
  Best Local Similarity 100.0%; Score 17; DB 1; Length 17;
  Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 194 GCTTCTGAGATGAGTGA 210
Db 1 GCTTCTGAGATGAGTGA 17

RESULT 98
LOCUS AX579597/c 17 bp RNA linear PAT 10-JAN-2003
DEFINITION Sequence 1435 from Patent WO0211674.
ACCESSION AX579597
VERSION AX579597.1 GI:27648799
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Thompson,J., Mcswiggen,J., Mckenzie,T., Ayers,D., Szymkowski,D.E.
and Grupe,A.
TITLE Method and reagent for the inhibition of calcium activated chloride
channel-1 (clca-1)
JOURNAL Patent: WO 0211674-A 1435 14-FEB-2002;
RIBOZYME PHARMACEUTICALS, INC. (US) ; Syntex (U.S.A.) LLC (US) ;
Thompson, James (US)
FEATURES
  source
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        /mol_type="unassigned RNA"
        /db_xref="taxon:9606"

Query Match
  Best Local Similarity 100.0%; Score 17; DB 1; Length 17;
  Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1587 CAGCTGTGCCAGATGCT 1603
Db 17 CAGCTGTGCCAGATGCT 1

RESULT 99
LOCUS CQ827040/c 22 bp DNA linear PAT 29-JUN-2004
DEFINITION Sequence 5 from Patent WO2004050133.
ACCESSION CQ827040
VERSION CQ827040.1 GI:49455668
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
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FEATURES
  source
    Location/Qualifiers
      17 bp DNA linear PAT 18-SEP-2002
      Protein encoded by polynucleic acid of porcine reproductive and
      respiratory syndrome virus (PRRSV).

QY 194 GCTTCTGAGATGAGTGA 210
Db 1 GCTTCTGAGATGAGTGA 17

RESULT 96
LOCUS BD137775 17 bp DNA linear PAT 18-SEP-2002
DEFINITION Protein encoded by polynucleic acid of porcine reproductive and
respiratory syndrome virus (PRRSV).
ACCESSION BD137775
VERSION BD137775.1 GI:23232720
KEYWORDS JP 2002504317-A/60.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 17)
AUTHORS Paul,P.S. and Zhang,Y.
TITLE Protein encoded by polynucleic acid of porcine reproductive and
respiratory syndrome virus (PRRSV)
JOURNAL Patent: JP 2002504317-A 60 12-FEB-2002;
COMMENT IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC,AMERICAN CYANAMID CO
OS Artificial Sequence
PN JP 2002504317-A/60
PD 12-FEB-2002
PR 08-FEB-1999 JP 2000530103
PR 06-FEB-1998 US 05/019793
PI PREM S PAUL,YANJIN ZHANG
PC C12N15/09,A61K39/12,A61P31/14,C07K14/08,C12Q1/68//C07K16/10,
PC C12N15/00
CC Description of Artificial Sequence:Synthetic DNA FH Key
FT source
FT 1..17
/organism='Artificial Sequence'.

FEATURES
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    Location/Qualifiers
      1..17
        /organism="synthetic construct"
        /mol_type="genomic DNA"
        /db_xref="taxon:32630"

Query Match
  Best Local Similarity 100.0%; Score 17; DB 1; Length 17;
  Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 194 GCTTCTGAGATGAGTGA 210
Db 1 GCTTCTGAGATGAGTGA 17

RESULT 97
LOCUS BD137798 17 bp DNA linear PAT 18-SEP-2002
DEFINITION Protein encoded by polynucleic acid of porcine reproductive and
respiratory syndrome virus (PRRSV).
ACCESSION BD137798
VERSION BD137798.1 GI:23232743
KEYWORDS JP 2002504317-A/83.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 17)
AUTHORS Paul,P.S. and Zhang,Y.
TITLE Protein encoded by polynucleic acid of porcine reproductive and
respiratory syndrome virus (PRRSV)
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QY 1049 ACGGCTCCACAAAGGTGCTC 1069

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Db      21  ACGGCTCCACAAAAGGATCCC 1

RESULT 108
LOCUS   AR241831/c
DEFINITION
Sequence 119 from patent US 6472154.
ACCESSION
AR241831
VERSION
AR241831.1 GI:27287643
KEYWORDS
Unknown.
SOURCE
Unknown.
ORGANISM
Unclassified.
REFERENCE
1 (bases 1 to 21)
AUTHORS
Garner,H.R., Wren,J.D., Minna,J.D. and Fondon,J.W. III.
TITLE
Polymorphic repeats in human genes
JOURNAL
Patent: US 6472154-A 119 29-OCT-2002;
FEATURES
Location/Qualifiers
source
1..21
/organism="unknown"
/mol_type="genomic DNA"

Query Match
Best Local Similarity 0.8%; Score 16.2; DB 1; Length 21;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      1652 AAAGAAATATAGACGAAAAA 1672
Db      21  AAAAAAATAAATAAAAAA 1

RESULT 109
LOCUS   AR353144/c
DEFINITION
Sequence 34 from patent US 6592873.
ACCESSION
AR353144
VERSION
AR353144.1 GI:33758857
KEYWORDS
Unknown.
SOURCE
Unknown.
ORGANISM
Unclassified.
REFERENCE
1 (bases 1 to 16)
AUTHORS
Paul,P.S., Meng,X.-J., Halbur,P., Morozov,I. and Lum,M.A.
TITLE
Polynucleic acids isolated from a porcine reproductive and
respiratory syndrome virus (PRRSV) and proteins encoded by the
polynucleic acids
JOURNAL
Patent: US 6592873-A 34 15-JUL-2003;
FEATURES
Location/Qualifiers
source
1..16
/organism="unknown"
/mol_type="genomic DNA"

Query Match
Best Local Similarity 0.8%; Score 16; DB 1; Length 16;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1674 CCGGAGAGCCCCATT 1689
Db      16  CCGGAGAGCCCCATT 1

RESULT 110
LOCUS   AX578745/c
DEFINITION
Sequence 583 from Patent WO0211674.
ACCESSION
AX578745
VERSION
AX578745.1 GI:27647947
KEYWORDS
Homo sapiens (human)
SOURCE
Homo sapiens
ORGANISM
Homo sapiens
REFERENCE
1

AUTHORS
Thompson,J., Mcswiggen,J., Mckenzie,T., Ayers,D., Szymkowski,D.E.
and Grupe,A.
TITLE
Method and reagent for the inhibition of calcium activated chloride
channel-1 (clca-1)
JOURNAL
Patent: WO 0211674-A 583 14-FEB-2002;
RIBOZYME PHARMACEUTICALS, INC. (US) ; Syntex (U.S.A.) LLC (US) ;
Thompson, James (US)
FEATURES
Location/Qualifiers
source
1..17
/organism="Homo sapiens"
/mol_type="unassigned RNA"
/db_xref="taxon:9606"

Query Match
Best Local Similarity 0.8%; Score 16; DB 1; Length 17;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1586 TCAGCTGTGCCAGATG 1601
Db      16  TCAGCTGTGCCAGATG 1

RESULT 111
LOCUS   AX580042/c
DEFINITION
Sequence 1880 from Patent WO0211674.
ACCESSION
AX580042
VERSION
AX580042.1 GI:27649244
KEYWORDS
Homo sapiens (human)
SOURCE
Homo sapiens
ORGANISM
Homo sapiens
REFERENCE
1
AUTHORS
Thompson,J., Mcswiggen,J., Mckenzie,T., Ayers,D., Szymkowski,D.E.
and Grupe,A.
TITLE
Method and reagent for the inhibition of calcium activated chloride
channel-1 (clca-1)
JOURNAL
Patent: WO 0211674-A 1880 14-FEB-2002;
RIBOZYME PHARMACEUTICALS, INC. (US) ; Syntex (U.S.A.) LLC (US) ;
Thompson, James (US)
FEATURES
Location/Qualifiers
source
1..17
/organism="Homo sapiens"
/mol_type="unassigned RNA"
/db_xref="taxon:9606"

Query Match
Best Local Similarity 0.8%; Score 16; DB 1; Length 17;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1588 AGCTGTGCCAGATGCT 1603
Db      17  AGCTGTGCCAGATGCT 2

RESULT 112
LOCUS   BD093144/c
DEFINITION
A gene coading a cyclic llopeptide acylase and an expression
thereof.
ACCESSION
BD093144
VERSION
BD093144.1 GI:23638732
KEYWORDS
WO 0102585-A/7.
synthetic construct
SOURCE
other sequences; artificial sequences.
ORGANISM
1 (bases 1 to 19)
REFERENCE
1
AUTHORS
Shibata,T., Noguchi,Y. and Ymashita,M.
TITLE
A gene coading a cyclic llopeptide acylase and an expression
JOURNAL
Patent: WO 0102585-A 7 11-JAN-2001;
FUJISAWA PHARMACEUTICAL CO LTD,TAKASHI SHIBATA,YUJI NOGUCHI,MICHIO
YMAISHITA
```

COMMENT OS Artificial Sequence  
PN WO 0102585-A/7  
PD 11-JAN-2001  
PF 28-JUN-2000 WO 2000JP004285  
PR 02-JUL-1999 JP 99P 189644  
PI TAKASHI SHIBATA,YUJI NOGUCHI,MICHIO YAMASHITA  
PC C12N15/55,C12N1/21,C12N9/14  
CC Oligonucleotide designed to act as PCR primer (reverse) to CC  
amplify the DNA  
CC coding sequence between FR901379 acryase small subunit and CC  
large subunit.  
FH Key Location/Qualifiers.  
FEATURES  
source 1. .19 Location/Qualifiers  
/organism="synthetic construct"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32630"

Query Match 0.8%; Score 15.8; DB 1; Length 19;  
Best Local Similarity 89.5%; Pred. No. 1.8e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1427 GGCTCCACTACGCTCAACG 1445  
Db 19 GGCTCCACGACGGTGAACG 1  
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RESULT 113  
AR112279  
LOCUS AR112279 20 bp DNA linear PAT 16-MAY-2001  
DEFINITION Sequence 47 from patent US 6130042.  
ACCESSION AR112279  
VERSION AR112279.1 GI:14092179  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Diehl,S.R., Schenkein,H.A. and Wang,Y.-F.  
TITLE Compositions and methods for diagnosing periodontal disease  
JOURNAL Patent: US 6130042-A 47 10-OCT-2000;  
FEATURES  
source 1. .20 Location/Qualifiers  
/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 0.8%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 11 GCTGTCTCTCCAAGACATCA 29  
Db 2 GGTGTCTCTCCAGAAATCA 20  
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RESULT 114  
AR136424/c  
LOCUS AR136424 20 bp DNA linear PAT 16-JUN-2001  
DEFINITION Sequence 19 from patent US 6136604.  
ACCESSION AR136424  
VERSION AR136424.1 GI:14477096  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Monia,B.P. and Wyatt,J.  
TITLE Antisense inhibition of methionine aminopeptidase 2 expression  
JOURNAL Patent: US 6136604-A 19 24-OCT-2000;  
FEATURES  
source 1. .20 Location/Qualifiers  
/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 0.8%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1653 AAGAAAAAATAAGAGAAAA 1671  
Db 19 AAGAAAAAAGAGAGAAAGA 1  
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RESULT 115  
AR472660  
LOCUS AR472660 20 bp DNA linear PAT 09-AUG-2002  
DEFINITION Sequence 36 from Patent WO0236628.  
ACCESSION AR472660  
VERSION AR472660.1 GI:22207536  
KEYWORDS  
SOURCE synthetic construct  
ORGANISM synthetic construct  
other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Bornaes,C., Andersen,K.V., Rasmussen,P.B. and Pedersen,A.H.  
TITLE New multimeric interferon beta polypeptides  
JOURNAL Patent: WO 0236628-A 36 10-MAY-2002;  
Maxygen Aps (DK)  
FEATURES  
source 1. .20 Location/Qualifiers  
/organism="synthetic construct"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"  
/note="Synthetic primer"

Query Match 0.8%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1147 GCACCTTTTGGTCTTCCTG 1165  
Db 2 GCACCTATTGGTCTTACTG 20  
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RESULT 116  
AR644183  
LOCUS AR644183 20 bp DNA linear PAT 27-FEB-2003  
DEFINITION Sequence 6 from Patent WO02099092.  
ACCESSION AR644183  
VERSION AR644183.1 GI:28610257  
KEYWORDS  
SOURCE synthetic construct  
ORGANISM synthetic construct  
other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Fogh,J., Irani,M., Andersson,C. and Weigelt,C.  
TITLE Production of recombinant human lysosomal alpha-mannosidase  
JOURNAL Patent: WO 02099092-A 6 12-DEC-2002;  
HemeBiotech A/S (DK)  
FEATURES  
source 1. .20 Location/Qualifiers  
/organism="synthetic construct"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"  
/note="oligonucleotide ICO929"

Query Match 0.8%; Score 15.8; DB 1; Length 20;  
Best Local Similarity 89.5%; Pred. No. 2e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1147 GCACCTTTTGGTCTTCCTG 1165  
Db 2 GCACCTATTGGTCTTACTG 20  
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RESULT 117

AR107536  
LOCUS AR107536 21 bp DNA linear PAT 14-FEB-2001  
DEFINITION Sequence 25 from patent US 6110467.  
ACCESSION AR107536  
VERSION AR107536.1 GI:12823023  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 21)  
AUTHORS Paul,P.S., Halbur,P.G., Meng,X.-J., Lyoo,Y.S. and Lum,M.Anne.  
TITLE Isolated porcine respiratory and reproductive virus, vaccines and methods of protecting a pig against a disease caused by a porcine respiratory and reproductive virus  
JOURNAL Patent: US 6110467-A 25 29-AUG-2000;  
FEATURES  
source Location/Qualifiers  
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/organism="unknown"  
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Query Match 0.8%; Score 15.8; DB 1; Length 21;  
Best Local Similarity 89.5%; Pred. No. 2.1e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 990 GTAACACAGAGTTTCAGCGG 1008  
| | | | | | | | | | | | | | | | | | | | |  
Db 3 GGATCCAGAGTTTCAGCGG 21  
RESULT 118  
AR158335  
LOCUS AR158335 21 bp DNA linear PAT 17-OCT-2001  
DEFINITION Sequence 25 from patent US 6251404.  
ACCESSION AR158335  
VERSION AR158335.1 GI:16220355  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 21)  
AUTHORS Paul,P.S., Halbur,P.G., Meng,X.-J., Lyoo,Y.S. and Lum,M.Anne.  
TITLE Method of producing a vaccine which raises an immunological response against a virus causing a porcine respiratory and reproductive disease  
JOURNAL Patent: US 6251404-A 25 26-JUN-2001;  
FEATURES  
source Location/Qualifiers  
1..21  
/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 0.8%; Score 15.8; DB 1; Length 21;  
Best Local Similarity 89.5%; Pred. No. 2.1e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 990 GTAACACAGAGTTTCAGCGG 1008  
| | | | | | | | | | | | | | | | | | | | |  
Db 3 GGATCCAGAGTTTCAGCGG 21  
RESULT 119  
BD137729  
LOCUS BD137729 21 bp DNA linear PAT 18-SEP-2002  
DEFINITION Protein encoded by polynucleic acid of porcine reproductive and respiratory syndrome virus (PRRSV).  
ACCESSION BD137729  
VERSION BD137729.1 GI:23232674  
KEYWORDS JP 2002504317-A/14.  
SOURCE synthetic construct  
ORGANISM synthetic construct  
REFERENCE 1 (bases 1 to 21)  
AUTHORS Paul,P.S. and Zhang,Y.  
TITLE Protein encoded by polynucleic acid of porcine reproductive and

respiratory syndrome virus (PRRSV)  
Patent: JP 2002504317-A 14 12-FEB-2002;  
IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC,AMERICAN CYANAMID CO  
OS Artificial Sequence  
PN JP 2002504317-A/14  
PD 12-FEB-2002  
PF 08-FEB-1999 JP 2000530103  
PR 06-FEB-1998 US 09/019793  
PI PREM S PAUL,YANJIN ZHANG  
PC C12N15/09,A61K39/12,A61P31/14,C07K14/08,C12Q1/68//C07K16/10,  
C12N15/00  
CC Description of Artificial Sequence:Synthetic DNA FH Key  
Location/Qualifiers  
FT source 1..21  
/organism='Artificial Sequence'.  
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source Location/Qualifiers  
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/organism="synthetic construct"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32630"  
Query Match 0.8%; Score 15.8; DB 1; Length 21;  
Best Local Similarity 89.5%; Pred. No. 2.1e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 990 GTAACACAGAGTTTCAGCGG 1008  
| | | | | | | | | | | | | | | | | | | | |  
Db 3 GGATCCAGAGTTTCAGCGG 21  
RESULT 120  
I84226  
LOCUS I84226 21 bp DNA linear PAT 04-APR-1998  
DEFINITION Sequence 28 from patent US 5695766.  
ACCESSION I84226  
VERSION I84226.1 GI:3021746  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 21)  
AUTHORS Paul,P.S., Halbur,P.G., Meng,X.-J., Lyoo,Y.S. and Lum,M.Anne.  
TITLE Highly virulent porcine reproductive and respiratory syndrome viruses which produce lesions in pigs and vaccines that protect pigs against said syndrome  
JOURNAL Patent: US 5695766-A 28 09-DEC-1997;  
FEATURES  
source Location/Qualifiers  
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/mol\_type="unassigned DNA"  
Query Match 0.8%; Score 15.8; DB 1; Length 21;  
Best Local Similarity 89.5%; Pred. No. 2.1e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 990 GTAACACAGAGTTTCAGCGG 1008  
| | | | | | | | | | | | | | | | | | | | |  
Db 3 GGATCCAGAGTTTCAGCGG 21  
RESULT 121  
AR353140  
LOCUS AR353140 21 bp DNA linear PAT 17-AUG-2003  
DEFINITION Sequence 30 from patent US 6592873.  
ACCESSION AR353140  
VERSION AR353140.1 GI:33758853  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 21)  
AUTHORS Paul,P.S., Meng,X.-J., Halbur,P., Morozov,I. and Lum,M.A.  
TITLE Polynucleic acids isolated from a porcine reproductive and



AR001459  
LOCUS AR001459 20 bp DNA linear PAT 04-DEC-1998  
DEFINITION Sequence 2 from patent US 5739282.  
ACCESSION AR001459  
VERSION AR001459.1 GI:3963526  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Colotta,F., Muzio,M. and Mantovani,A.  
TITLE Interleukin-1 antagonist  
JOURNAL Patent: US 5739282-A 2 14-APR-1998;  
FEATURES Location/Qualifiers  
source  
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/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 2.3e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 504 GCGCTCGTCAGCGCCCAACGG 523  
Db 1 GCGCTCGTCGTCGACACGG 20  
RESULT 127  
AR030970/c  
LOCUS AR030970 20 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 2 from patent US 5861501.  
ACCESSION AR030970  
VERSION AR030970.1 GI:5944184  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Benseler,F., Cole,J.L., Olsen,D.B. and Kuo,L.C.  
TITLE Capped synthetic RNA, analogs, and aptamers  
JOURNAL Patent: US 5861501-A 2 19-JAN-1999;  
FEATURES Location/Qualifiers  
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/mol\_type="unassigned DNA"  
Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 2.3e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1655 GAAATTAAGAGAAAAACC 1674  
Db 20 GAAATTAAGAAAAAACC 1  
RESULT 128  
AR055504  
LOCUS AR055504 20 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 2 from patent US 5837495.  
ACCESSION AR055504  
VERSION AR055504.1 GI:5981081  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Colotta,F., Muzio,M. and Mantovani,A.  
TITLE DNA encoding interleukin-1 antagonist  
JOURNAL Patent: US 5837495-A 2 17-NOV-1998;  
FEATURES Location/Qualifiers  
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/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 2.3e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 504 GCGCTCGTCAGCGCCCAACGG 523  
Db 1 GCGCTCGTCGTCGACACGG 20  
RESULT 129  
AR064160/c  
LOCUS AR064160 20 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 4 from patent US 5846790.  
ACCESSION AR064160  
VERSION AR064160.1 GI:5993468  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Kimura,E., Asakura,Y., Uehara,A., Inoue,S., Kawahara,Y.,  
Yoshihara,Y. and Nakamatsu,T.  
TITLE Methods of producing L-lysine and L-glutamic acid by fermentation  
JOURNAL Patent: US 5846790-A 4 08-DEC-1998;  
FEATURES Location/Qualifiers  
source  
1..20  
/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 2.3e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1594 GCCAGATCGTGGTAAGATC 1613  
Db 20 GCCAGATCTGGGAAAGATC 1  
RESULT 130  
AR083916/c  
LOCUS AR083916 20 bp DNA linear PAT 01-SEP-2000  
DEFINITION Sequence 6 from patent US 5977331.  
ACCESSION AR083916  
VERSION AR083916.1 GI:10010687  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Asakura,Y., Usuda,Y., Tsujimoto,N., Kimura,E., Abe,C., Kawahara,Y.,  
Nakamatsu,T. and Kurahashi,O.  
TITLE .alpha.-Ketoglutarate dehydrogenase gene  
JOURNAL Patent: US 5977331-A 6 02-NOV-1999;  
FEATURES Location/Qualifiers  
source  
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/mol\_type="unassigned DNA"  
Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 2.3e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1594 GCCAGATCGTGGTAAGATC 1613  
Db 20 GCCAGATCTGGGAAAGATC 1  
RESULT 131  
AR085387  
LOCUS AR085387 20 bp DNA linear PAT 01-SEP-2000  
DEFINITION Sequence 2 from patent US 5981713.  
ACCESSION AR085387



VERSION AR085387.1 GI:10012156  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Colotta,F., Muzio,M. and Mantovani,A.  
TITLE Antibodies to interleukin-1 antagonists  
JOURNAL Patent: US 5981713-A 2 09-NOV-1999;  
FEATURES Location/Qualifiers  
source  
1..20  
/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 2.3e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 504 GCCTCGTCAGCGCCACGG 523  
Db 1 GCCTCGTCGTCGACACGG 20

RESULT 132  
AR100170  
LOCUS AR100170 20 bp DNA linear PAT 14-FEB-2001  
DEFINITION Sequence 20 from patent US 6080567.  
ACCESSION AR100170  
VERSION AR100170.1 GI:12810618  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Kofod,L.Venke., Kauppinen,M.Sakari., Christgau,S.,  
Heidt-Hansen,H.Peter., Dalb.o slashed.ge.H., Andersen,L.Nonboe.,  
Si,J.Qi., Jacobsen,T.Sejersgandrd., Munk,N. and Mullertz,A.  
TITLE Enzymes with xylanase activity from Aspergillus aculeatus  
JOURNAL Patent: US 6080567-A 20 27-JUN-2000;  
FEATURES Location/Qualifiers  
source  
1..20  
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/mol\_type="unassigned DNA"

Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 2.3e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 637 CTGTGTTGACTCATTGTC 656  
Db 1 CTGTGTTGCCAACATTGTC 20

RESULT 133  
AR108815/c  
LOCUS AR108815 20 bp DNA linear PAT 14-FEB-2001  
DEFINITION Sequence 2 from patent US 6111095.  
ACCESSION AR108815  
VERSION AR108815.1 GI:12824302  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Benseler,F., Cole,J.L., Olsen,D.B. and Kuo,L.C.  
TITLE Capped synthetic RNA, analogs, and aptamers  
JOURNAL Patent: US 6111095-A 2 29-AUG-2000;  
FEATURES Location/Qualifiers  
source  
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/mol\_type="unassigned DNA"

Query Match 0.7%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 2.3e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1655 GAAATAATAAGAGAAAAACC 1674  
Db 20 GAAATTTAAATATAAAACC 1

RESULT 134  
AR129749  
LOCUS AR129749 20 bp DNA linear PAT 16-MAY-2001  
DEFINITION Sequence 153 from patent US 6187545.  
ACCESSION AR129749  
VERSION AR129749.1 GI:14117646  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS McKay,R., Butler,M.M., Wyatt,J. and Cowsett,L.M.  
TITLE Antisense modulation of pepck-cytosolic expression  
JOURNAL Patent: US 6187545-A 153 13-FEB-2001;  
FEATURES Location/Qualifiers  
source  
1..20  
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/mol\_type="unassigned DNA"

Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 2.3e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 25 CATCAGTCGCTTAGGCATC 44  
Db 1 CTTAAGTTGCTTGGGCATC 20

RESULT 135  
AR137860  
LOCUS AR137860 20 bp DNA linear PAT 16-JUN-2001  
DEFINITION Sequence 20 from patent US 6197564.  
ACCESSION AR137860  
VERSION AR137860.1 GI:14479369  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Kofod,L.Venke., Kauppinen,M.Sakari., Christgau,S.,  
Heidt-Hansen,H.Peter., Dalb.o slashed.ge.H., Andersen,L.Nonboe.,  
Si,J.Qi., Jacobsen,T.Sejersgandrd., Munk,N. and Mullertz,A.  
TITLE Enzymes with xylanase activity from Aspergillus aculeatus  
JOURNAL Patent: US 6197564-A 20 06-MAR-2001;  
FEATURES Location/Qualifiers  
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/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 2.3e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 637 CTGTGTTGACTCATTGTC 656  
Db 1 CTGTGTTGCCAACATTGTC 20

RESULT 136  
AR149854  
LOCUS AR149854 20 bp DNA linear PAT 08-AUG-2001  
DEFINITION Sequence 20 from patent US 6228630.  
ACCESSION AR149854  
VERSION AR149854.1 GI:15114445  
KEYWORDS

SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Kofod,L.,Venke., Kauppinen,M.,Sakari., Christgau,S.,  
Heldt-Hansen,H.,Peter., Dalb.o slashed.ge,H., Andersen,L.,Nonboe.,  
Si,J.,Qi., Jacobsen,T.,Sejersgangard., Munk,N. and Mullertz,A.  
TITLE Enzymes with xylanase activity from aspergillus aculeatus  
JOURNAL Patent: US 6228630-A 20 08-MAY-2001;  
FEATURES Location/Qualifiers  
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1. .20  
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Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 2.3e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 637 CTGTGTTGACTCACATTGTC 656  
Db 1 CTGTGTTGCCAACATTGTC 20  
RESULT 137  
CQ761925/c  
LOCUS 20 bp DNA linear PAT 03-MAR-2004  
DEFINITION Sequence 543 from Patent WO2004003201.  
ACCESSION CQ761925  
VERSION CQ761925.1 GI:44905161  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Kane,C.D.  
TITLE Antisense modulation of lrlh expression  
JOURNAL Patent: WO 2004003201-A 543 08-JAN-2004;  
Pharmacia Corporation (US)  
FEATURES Location/Qualifiers  
source  
1. .20  
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/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"  
/note="Human LRLH antisense"  
Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 2.3e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1653 AAGAAAAATAAGAGAAAAA 1672  
Db 20 AAGAGACAGGAGAAAAA 1  
RESULT 138  
CQ763254  
LOCUS 20 bp DNA linear PAT 03-MAR-2004  
DEFINITION Sequence 1872 from Patent WO2004003201.  
ACCESSION CQ763254  
VERSION CQ763254.1 GI:44906490  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Kane,C.D.  
TITLE Antisense modulation of lrlh expression  
JOURNAL Patent: WO 2004003201-A 1872 08-JAN-2004;  
Pharmacia Corporation (US)  
FEATURES Location/Qualifiers  
source  
1. .20  
/organism="synthetic construct"  
/mol\_type="unassigned DNA"

/db\_xref="taxon:32630"  
/note="Human LRLH antisense"  
Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 2.3e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1921 CCACAGTGTGTTGAATTGGAAG 1940  
Db 1 CCACAGTATCTGAATTAGAAG 20  
RESULT 139  
CQ763441  
LOCUS 20 bp DNA linear PAT 03-MAR-2004  
DEFINITION Sequence 2059 from Patent WO2004003201.  
ACCESSION CQ763441  
VERSION CQ763441.1 GI:44906677  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Kane,C.D.  
TITLE Antisense modulation of lrlh expression  
JOURNAL Patent: WO 2004003201-A 2059 08-JAN-2004;  
Pharmacia Corporation (US)  
FEATURES Location/Qualifiers  
source  
1. .20  
/organism="synthetic construct"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"  
/note="Human LRLH antisense"  
Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 2.3e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1922 CCAGTGTGTTGAATTGGAAGA 1941  
Db 1 CCAGTATCTGAATTAGAAGA 20  
RESULT 140  
E11833/c  
LOCUS 20 bp DNA linear PAT 29-SEP-1997  
DEFINITION Primer.  
ACCESSION E11833  
VERSION E11833.1 GI:22025455  
KEYWORDS JP 1996205898-A/18.  
SOURCE unidentified  
ORGANISM unidentified.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Matsumoto,H., Iwasaki,T., Shimazu,M., Osumi,K. and Yamamori,T.  
TITLE DNA FRAGMENT CONTAINING GENE PARTICIPATING IN SEX-LINKED  
JOURNAL AGAMMAGLOBULINEMIA AND METHOD FOR ANALYZING THE SAME  
PATENT: JP 1986205898-A 18 13-AUG-1996;  
MITSUBISHI KAGAKU B C L:KK  
COMMENT OS None  
OC Artificial sequences.  
PN JP 1996205898-A/18  
PD 13-AUG-1996  
PF 01-FEB-1995 JP 1995034715  
PI MATSUMOTO HIROSHI, IWASAKI TATSU, SHIMAZU MITSUNOBU, PI  
OSUMI KAZUOKI,  
PI YAMAMORI TOSHIHARU  
PC C1201/68.C07H21/02.C07H21/04.C12N15/09;  
CC strandedness: Single;  
CC topology: Linear;  
FH Key Location/Qualifiers  
FT source 1. .20

FEATURES	FT	Location/Qualifiers	/organism='Artificial sequences'
source		1. .20	
Query Match		0.7%; Score 15.2; DB 1; Length 20;	
Best Local Similarity		85.0%; Pred. No. 2.3e+02;	
Matches	17;	Conservative 0; Mismatches 3; Indels 0; Gaps 0;	
Qy	1087	CTACAGCCAGTCATGATAT 1106	
Db	20	CAAGAAGCCAGTCATGATAT 1	
RESULT 141			
LOCUS	I77256	20 bp DNA linear PAT 03-APR-1998	
DEFINITION	Sequence 20 from patent US 5693518.		
ACCESSION	I77256		
VERSION	I77256.1	GI:3013410	
KEYWORDS			
SOURCE	Unknown.		
ORGANISM	Unknown.		
REFERENCE	1 (bases 1 to 20)		
AUTHORS	Kofod, L., Venke., Kauppinen, M., Sakari., Christgau, S., Heldt-Hansen, H., Peter., Dalb.o slashed, ge, H., Andersen, L., Nonboe., St, J., Qi., Jacobsen, T., Sejergaard., Munk, N., and Mullertz, A.		
TITLE	Enzymes with xylanase activity from Aspergillus aculeatus		
JOURNAL	Patent: US 5693518-A 20 02-DEC-1997;		
FEATURES	Location/Qualifiers		
source	1. .20		
/organism="unknown"			
/mol_type="unassigned DNA"			
Query Match		0.7%; Score 15.2; DB 1; Length 20;	
Best Local Similarity		85.0%; Pred. No. 2.3e+02;	
Matches	17;	Conservative 0; Mismatches 3; Indels 0; Gaps 0;	
Qy	637	CTGTGTTGACTCATTGTC 656	
Db	1	CTGTGTTGCCAACATTGTC 20	
RESULT 142			
LOCUS	AR205764/c	20 bp DNA linear PAT 20-JUN-2002	
DEFINITION	Sequence 2 from patent US 6369208.		
ACCESSION	AR205764		
VERSION	AR205764.1	GI:21503429	
KEYWORDS			
SOURCE	Unknown.		
ORGANISM	Unknown.		
REFERENCE	1 (bases 1 to 20)		
AUTHORS	Cole, J. L., Kuo, L. C., Olsen, D. B., and Benseler, F.		
TITLE	Capped synthetic RNA, analogs, and aptamers		
JOURNAL	Patent: US 6369208-A 2 09-APR-2002;		
FEATURES	Location/Qualifiers		
source	1. .20		
/organism="unknown"			
/mol_type="unassigned DNA"			
Query Match		0.7%; Score 15.2; DB 1; Length 20;	
Best Local Similarity		85.0%; Pred. No. 2.3e+02;	
Matches	17;	Conservative 0; Mismatches 3; Indels 0; Gaps 0;	
Qy	1655	GAAGAAATAGAGAAAAACC 1674	
Db	20	GAAGAAATTAAGAAATTAAGAAACC 1	
RESULT 143			
LOCUS	AR211367/c	20 bp DNA linear PAT 20-JUN-2002	
DEFINITION	Sequence 5 from patent US 6399305.		
ACCESSION	AR211367		
VERSION	AR211367.1	GI:21514670	
KEYWORDS			
SOURCE	Unknown.		
ORGANISM	Unknown.		
REFERENCE	1 (bases 1 to 20)		
AUTHORS	Makino, Y., Abe, Y., Takagi, M., Takenaka, S., Yamashita, K. and Ogawa, M.		
TITLE	Protection of partial complementary nucleic acid fragment using a electroconductive chip and intercalator		
JOURNAL	Patent: US 6399305-A 5 04-JUN-2002;		
FEATURES	Location/Qualifiers		
source	1. .20		
/organism="unknown"			
/mol_type="unassigned DNA"			
Query Match		0.7%; Score 15.2; DB 1; Length 20;	
Best Local Similarity		85.0%; Pred. No. 2.3e+02;	
Matches	17;	Conservative 0; Mismatches 3; Indels 0; Gaps 0;	
Qy	1652	AAAGAAAAATAAGAAAAA 1671	
Db	20	AAAAAAAATAAAAAAAA 1	
RESULT 144			
LOCUS	AR442655	20 bp DNA linear PAT 20-FEB-2004	
DEFINITION	Sequence 4 from patent US 6670135.		
ACCESSION	AR442655		
VERSION	AR442655.1	GI:42669916	
KEYWORDS			
SOURCE	Unknown.		
ORGANISM	Unknown.		
REFERENCE	1 (bases 1 to 20)		
AUTHORS	Spriggs, M. K.		
TITLE	Semaphorin polypeptides		
JOURNAL	Patent: US 6670135-A 4 30-DEC-2003;		
FEATURES	Location/Qualifiers		
source	1. .20		
/organism="unknown"			
/mol_type="genomic DNA"			
Query Match		0.7%; Score 15.2; DB 1; Length 20;	
Best Local Similarity		85.0%; Pred. No. 2.3e+02;	
Matches	17;	Conservative 0; Mismatches 3; Indels 0; Gaps 0;	
Qy	1004	ACGGGAACAATGGAGTCCTC 1023	
Db	1	AGTGGAAACAATGGCGCTTC 20	
RESULT 145			
LOCUS	AX136903/c	20 bp DNA linear PAT 30-MAY-2001	
DEFINITION	Sequence 5 from Patent EP1065278.		
ACCESSION	AX136903		
VERSION	AX136903.1	GI:14273252	
KEYWORDS			
SOURCE	synthetic construct		
ORGANISM	synthetic construct		
REFERENCE	1	other sequences; artificial sequences.	
AUTHORS	Makino, Y., Abe, Y., Ogawa, M., Takagi, M., Takenaka, S. and Yamashita, K.		
TITLE	Detection of partly complementary nucleic acid fragment		

```
JOURNAL Patent: EP 1065278-A 5 03-JAN-2001;
FEATURES FUJI PHOTO FILM CO., LTD. (JP)
source Location/Qualifiers
1. .20
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="sample nucleic acid fragment"

Query Match 0.7%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1652 AAAGAAAATAAGAGAAAA 1671
Db 20 AAAAAAAAAAAAAAAAAAAAA 1

RESULT 146
AX295262/c
LOCUS AX295262 20 bp DNA linear PAT 21-NOV-2001
DEFINITION Sequence 7024 from Patent WO0179548.
ACCESSION AX295262
VERSION AX295262.1 GI:17056951
KEYWORDS .
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Barany,P., Zirvi,M., Gerry,N.P., Favis,R. and Kliman,R.
TITLE Method of designing addressable array for detection of nucleic acid
sequence differences using ligase detection reaction
JOURNAL Patent: WO 0179548-A 7024 25-OCT-2001;
CORNELL RESEARCH FOUNDATION, INC. (US)
FEATURES source
1. .20
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Hypothetical Probe Sequence"

Query Match 0.7%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1772 CTTTAATCAAGCGCTGGGA 1791
Db 20 CTTTAAGCAACGCGATGGGA 1

RESULT 147
AX297306
LOCUS AX297306 20 bp DNA linear PAT 21-NOV-2001
DEFINITION Sequence 9068 from Patent WO0179548.
ACCESSION AX297306
VERSION AX297306.1 GI:17058997
KEYWORDS .
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Barany,P., Zirvi,M., Gerry,N.P., Favis,R. and Kliman,R.
TITLE Method of designing addressable array for detection of nucleic acid
sequence differences using ligase detection reaction
JOURNAL Patent: WO 0179548-A 9068 25-OCT-2001;
CORNELL RESEARCH FOUNDATION, INC. (US)
FEATURES source
1. .20
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Hypothetical Probe Sequence"

JOURNAL Patent: EP 1065278-A 5 03-JAN-2001;
FEATURES FUJI PHOTO FILM CO., LTD. (JP)
source Location/Qualifiers
1. .20
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="sample nucleic acid fragment"

Query Match 0.7%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1576 AGCCAGTCAATCAGCTGTGC 1595
Db 1 AGCCGGTAAATCACCTGTGC 20

RESULT 148
AX316289/c
LOCUS AX316289 20 bp DNA linear PAT 14-DEC-2001
DEFINITION Sequence 83 from Patent WO0190371.
ACCESSION AX316289
VERSION AX316289.1 GI:17899463
KEYWORDS .
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Julier,C., Delepine,M. and Nicolino,M.
TITLE Mutated eukariotic translation initiation factor 2 alpha kinase 3,
eif2ak3, in patients with neonatal insulin-dependent diabetes and
multiple epip hyseal dyseplasia (wolcott-rallison syndrome)
JOURNAL Patent: WO 0190371-A 83 29-NOV-2001;
INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE (INSERM)
(FR) ; Centre National de Genotypage (FR)
FEATURES source
1. .20
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Reverse primer."

Query Match 0.7%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1053 CTCGACAAAGGCTCTTG 1072
Db 20 CTCGACCAAGGCTACTCTTG 1

RESULT 149
AX571843/c
LOCUS AX571843 20 bp DNA linear PAT 27-MAR-2003
DEFINITION Sequence 2 from Patent WO02077274.
ACCESSION AX571843
VERSION AX571843.1 GI:26003977
KEYWORDS .
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Blanche,F. and Cameron,B.
TITLE Methods for purifying and detecting double stranded dna target
sequences by triple helix interaction
JOURNAL Patent: WO 02077274-A 2 03-OCT-2002;
Aventis Pharma S.A. (FR)
FEATURES source
1. .20
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Oligonucleotide"

Query Match 0.7%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1653 AAGAAAATAAGAGAAAA 1672
Db 20 AAGAAGAAGAGAGAGAA 1
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RESULT 150  
BD137832  
LOCUS 15 bp DNA linear PAT 18-SEP-2002  
DEFINITION Protein encoded by polynucleic acid of porcine reproductive and respiratory syndrome virus (PRRSV).  
ACCESSION BD137832  
VERSION BD137832.1 GI:23232777  
KEYWORDS JP 2002504317-A/117.  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 15)  
AUTHORS Paul, P.S. and Zhang, Y.  
TITLE Protein encoded by polynucleic acid of porcine reproductive and respiratory syndrome virus (PRRSV)  
JOURNAL Patent: JP 2002504317-A 117 12-FEB-2002;  
COMMENT IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC, AMERICAN CYANAMID CO  
OS Artificial Sequence  
PN JP 2002504317-A/117  
PD 12-FEB-2002  
PF 08-FEB-1999 JP 2000530103  
PR 06-FEB-1998 US 09/019793  
PI PREM S PAUL, YANJIN ZHANG  
PC C12N15/09, A61K39/12, A61P31/14, C07K14/08, C12Q1/68//C07K16/10, C12N15/00  
CC Description of Artificial Sequence: Synthetic DNA PH Key  
FT source 1.15  
FT Location/Qualifiers  
1.15 /organism="Artificial Sequence".  
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source  
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/mol\_type="genomic DNA"  
/db\_xref="taxon:32630"  
Query Match 0.7%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1503 AGGAGTGGTAACC 1517  
DB 1 AGGAGTGGTAACC 15  
RESULT 151  
BD137736/c  
LOCUS 19 bp DNA linear PAT 18-SEP-2002  
DEFINITION Protein encoded by polynucleic acid of porcine reproductive and respiratory syndrome virus (PRRSV).  
ACCESSION BD137736  
VERSION BD137736.1 GI:23232681  
KEYWORDS JP 2002504317-A/21.  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 19)  
AUTHORS Paul, P.S. and Zhang, Y.  
TITLE Protein encoded by polynucleic acid of porcine reproductive and respiratory syndrome virus (PRRSV)  
JOURNAL Patent: JP 2002504317-A 21 12-FEB-2002;  
COMMENT IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC, AMERICAN CYANAMID CO  
OS Artificial Sequence  
PN JP 2002504317-A/21  
PD 12-FEB-2002  
PF 08-FEB-1999 JP 2000530103  
PR 06-FEB-1998 US 09/019793  
PI PREM S PAUL, YANJIN ZHANG  
PC C12N15/09, A61K39/12, A61P31/14, C07K14/08, C12Q1/68//C07K16/10, C12N15/00  
CC Description of Artificial Sequence: Synthetic DNA PH Key  
FT source 1.15  
FT Location/Qualifiers  
1.15 /organism="Artificial Sequence".  
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source  
1.15 /organism="synthetic construct"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32630"  
Query Match 0.7%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1503 AGGAGTGGTAACC 1517  
DB 1 AGGAGTGGTAACC 15  
RESULT 152  
BD1377008  
LOCUS 18 bp DNA linear PAT 19-APR-2004  
DEFINITION Sequence 25 from Patent WO2004027066.  
ACCESSION CQ797008  
VERSION CQ797008.1 GI:46408584  
KEYWORDS unidentified  
SOURCE unidentified  
ORGANISM unclassified.  
REFERENCE 1  
AUTHORS Letourneur, O.  
TITLE Chimeric recombinant protein and in vitro diagnosis  
JOURNAL Patent: WO 2004027066-A 25 01-APR-2004;  
COMMENT Biomerieux (FR)  
FT source 1.18  
FT Location/Qualifiers  
1.18 /organism="unidentified"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32644"  
/note="artificial sequence"  
Query Match 0.7%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 2.2e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1653 AAGAAAATAGAGAA 1670  
DB 1 AAGAAAATAGAGAA 18  
RESULT 153  
I36664/c  
LOCUS 18 bp DNA linear PAT 13-MAY-1997  
DEFINITION Sequence 8 from patent US 5607924.  
ACCESSION I36664  
VERSION I36664.1 GI:2086489  
KEYWORDS Unknown.  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Magda, D., Sessler, J.L., Iverson, B.L., Sansom, P.I. and Wright, M.  
TITLE DNA photocleavage using texaphyrins  
JOURNAL Patent: US 5607924-A 8 04-MAR-1997;  
FEATURES  
source  
1.18 /organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 0.7%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 2.2e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1651 GAAAGAAAATAGAGAA 1668  
DB 1 GAAAGAAAATAGAGAA 1668

FT source 1.19  
FT Location/Qualifiers  
1.19 /organism="Artificial Sequence".  
FEATURES  
source  
1.19 /organism="synthetic construct"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32630"  
Query Match 0.7%; Score 15; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 2.2e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1940 GAATGCGTGTGAAT 1954  
DB 19 GAATGCGTGTGAAT 5  
RESULT 152  
CQ797008  
LOCUS 18 bp DNA linear PAT 19-APR-2004  
DEFINITION Sequence 25 from Patent WO2004027066.  
ACCESSION CQ797008  
VERSION CQ797008.1 GI:46408584  
KEYWORDS unidentified  
SOURCE unidentified  
ORGANISM unclassified.  
REFERENCE 1  
AUTHORS Letourneur, O.  
TITLE Chimeric recombinant protein and in vitro diagnosis  
JOURNAL Patent: WO 2004027066-A 25 01-APR-2004;  
COMMENT Biomerieux (FR)  
FT source 1.18  
FT Location/Qualifiers  
1.18 /organism="unidentified"  
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/db\_xref="taxon:32644"  
/note="artificial sequence"  
Query Match 0.7%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 2.2e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1653 AAGAAAATAGAGAA 1670  
DB 1 AAGAAAATAGAGAA 18  
RESULT 153  
I36664/c  
LOCUS 18 bp DNA linear PAT 13-MAY-1997  
DEFINITION Sequence 8 from patent US 5607924.  
ACCESSION I36664  
VERSION I36664.1 GI:2086489  
KEYWORDS Unknown.  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Magda, D., Sessler, J.L., Iverson, B.L., Sansom, P.I. and Wright, M.  
TITLE DNA photocleavage using texaphyrins  
JOURNAL Patent: US 5607924-A 8 04-MAR-1997;  
FEATURES  
source  
1.18 /organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 0.7%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 2.2e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1651 GAAAGAAAATAGAGAA 1668  
DB 1 GAAAGAAAATAGAGAA 1668

Db 18 GAAAGAAAAGAAAGAGA 1

RESULT 154  
AX8705792  
LOCUS 18 bp DNA linear PAT 04-APR-2003  
DEFINITION Sequence 461 from Patent WO03014388.  
ACCESSION AX8705792  
VERSION AX8705792.1 GI:29562457  
KEYWORDS  
SOURCE  
ORGANISM  
synthetic construct  
synthetic construct  
other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Distler,J., Model,F. and Taubert,H.  
TITLE Method and nucleic acids for the analysis of colon cancer  
JOURNAL Patent: WO 03014388-A 461 20-FEB-2003;  
EpiGenomics AG (DE)  
FEATURES  
source  
1. .18  
Location/Qualifiers  
/organism="synthetic construct"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"  
/note="Detection oligonucleotide for TP53"  
Query Match 0.7%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 2.2e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 409 AATTGGAATGTTTAAGTA 426  
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Db 1 AAGTTGAATGTTTAGGTA 18

RESULT 155  
AX822874  
LOCUS 18 bp DNA linear PAT 11-DEC-2003  
DEFINITION Sequence 766 from Patent EPI340818.  
ACCESSION AX822874  
VERSION AX822874.1 GI:39749510  
KEYWORDS  
SOURCE  
ORGANISM  
synthetic construct  
synthetic construct  
other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Adorjan,P., Burger,M., Maier,S., Nimmrich,I., Becker,E., Lesche,R.,  
Rujan,T. and Schmitt,A.  
TITLE Method and nucleic acids for the analysis of a colon cell  
JOURNAL proliferative disorder  
Patent: EP 1340818-A 766 03-SEP-2003;  
EpiGenomics AG (DE)  
FEATURES  
source  
1. .18  
Location/Qualifiers  
/organism="synthetic construct"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"  
/note="Detection oligonucleotide for TP53"  
Query Match 0.7%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 2.2e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 409 AATTGGAATGTTTAAGTA 426  
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Db 1 AAGTTGAATGTTTAGGTA 18

RESULT 156  
AX826514  
LOCUS 18 bp DNA linear PAT 11-DEC-2003  
DEFINITION Sequence 766 from Patent WO03072821.  
ACCESSION AX826514  
VERSION AX826514.1 GI:39752028

KEYWORDS  
SOURCE  
ORGANISM  
synthetic construct  
synthetic construct  
other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Adorjan,P., Burger,M., Maier,S., Nimmrich,I., Becker,E., Lesche,R.,  
Rujan,T. and Schmitt,A.  
TITLE Method and nucleic acids for the analysis of a colon cell  
JOURNAL proliferative disorder  
Patent: WO 03072821-A 766 04-SEP-2003;  
EpiGenomics AG (DE)  
FEATURES  
source  
1. .18  
Location/Qualifiers  
/organism="synthetic construct"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"  
/note="Detection oligonucleotide for TP53"  
Query Match 0.7%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 2.2e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 409 AATTGGAATGTTTAAGTA 426  
|| ||||| ||||| |||||  
Db 1 AAGTTGAATGTTTAGGTA 18

RESULT 157  
A87715/c  
LOCUS 19 bp DNA linear PAT 22-JAN-2000  
DEFINITION Sequence 9 from Patent WO9833523.  
ACCESSION A87715  
VERSION A87715.1 GI:6736317  
KEYWORDS  
SOURCE  
ORGANISM  
unidentified  
unidentified  
unclassified.  
REFERENCE 1 (bases 1 to 19)  
AUTHORS Cart,F.J. and Carter,G.  
TITLE VACCINATION METHODS AND MOLECULES  
JOURNAL Patent: WO 9833523-A 9 06-AUG-1998;  
BIOVATION LIMITED (GB); CARR FRANK JOSEPH (GB)  
FEATURES  
source  
1. .19  
Location/Qualifiers  
/organism="unidentified"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32644"  
Query Match 0.7%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 2.3e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 701 TCTGTCACCTGTCCTAC 718  
|| ||||| ||||| |||||  
Db 19 TCTGTCACCTGTCCTGC 2

RESULT 158  
BD195812/c  
LOCUS 19 bp DNA linear PAT 17-JUL-2003  
DEFINITION Method for the production of non-immunogenic proteins.  
ACCESSION BD195812  
VERSION BD195812.1 GI:33005582  
KEYWORDS JP 2002512624-A/83.  
SOURCE unidentified  
ORGANISM unidentified  
unclassified.  
REFERENCE 1 (bases 1 to 19)  
AUTHORS Cart,F.J., Adair,F.S., Hamilton,A.A. and Carter,G.  
TITLE Method for the production of non-immunogenic proteins  
JOURNAL Patent: JP 2002512624-A 83 23-APR-2002;  
BIOVATION LTD  
COMMENT OS Unidentified

PN JP 2002512624-A/83  
PD 23-APR-2002  
PF 21-MAY-1998 JP 1998550129  
PR 21-MAY-1997 GB 9710480.6,31-JUL-1997 GB 9716197.0 PR  
28-NOV-1997 GB 9725270.4,02-DEC-1997 US 60/067235 PR  
14-APR-1998 GB 9807751.4  
PI FRANCIS JOSEPH CARR,FIONA SUZANNE ADAIR,ANITA ANNE HAMILTON,  
PI GRAHAM CARTER  
PC C07K16/46,C07K14/315,G01N33/563,A61K39/395  
CC Strandedness: Single;  
CC Topology: Linear;  
CC Method for the production of non-immunogenic proteins FH Key  
FT source 1..19  
FT Location/Qualifiers  
FEATURES  
source 1..19  
/organism="unidentified"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32644"  
Query Match 0.7%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 2.3e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 701 TCTGGTCACTGTCTCTAC 718  
DB 19 TCTGGTCACTGTCTCTGC 2  
RESULT 159  
BD195862/c  
LOCUS 19 bp DNA linear PAT 17-JUL-2003  
DEFINITION Method for the production of non-immunogenic proteins.  
ACCESSION BD195862  
VERSION BD195862.1 GI:33005632  
KEYWORDS JP 2002512624-A/133.  
SOURCE unidentified  
ORGANISM unidentified  
REFERENCE 1 (bases 1 to 19)  
AUTHORS Carr,F.J., Adair,F.S., Hamilton,A.A. and Carter,G.  
TITLE Method for the production of non-immunogenic proteins  
JOURNAL Patent: JP 2002512624-A 133 23-APR-2002;  
COMMENT BIOVATION LTD  
OS Unidentified  
PN JP 2002512624-A/133  
PD 23-APR-2002  
PF 21-MAY-1998 JP 1998550129  
PR 21-MAY-1997 GB 9710480.6,31-JUL-1997 GB 9716197.0 PR  
28-NOV-1997 GB 9725270.4,02-DEC-1997 US 60/067235 PR  
14-APR-1998 GB 9807751.4  
PI FRANCIS JOSEPH CARR,FIONA SUZANNE ADAIR,ANITA ANNE HAMILTON,  
PI GRAHAM CARTER  
PC C07K16/46,C07K14/315,G01N33/563,A61K39/395  
CC Strandedness: Single;  
CC Topology: Linear;  
CC Method for the production of non-immunogenic proteins FH Key  
FT source 1..19  
FT Location/Qualifiers  
FEATURES  
source 1..19  
/organism="unidentified"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32644"  
Query Match 0.7%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 2.3e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 701 TCTGGTCACTGTCTCTAC 718  
DB 19 TCTGGTCACTGTCTCTGC 2

Db 19 TCTGGTCACTGTCTCTGC 2  
RESULT 160  
AR292429  
LOCUS 19 bp DNA linear PAT 12-JUN-2003  
DEFINITION Sequence 4164 from patent US 6537751.  
ACCESSION AR292429  
VERSION AR292429.1 GI:31679713  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 19)  
AUTHORS Cohen,D., Chumakov,I. and Blumenfeld,M.  
TITLE Biallelic markers for use in constructing a high density disequilibrium map of the human genome  
JOURNAL Patent: US 6537751-A 4164 25-MAR-2003;  
FEATURES Location/Qualifiers  
source 1..19  
/organism="unknown"  
/mol\_type="genomic DNA"  
Query Match 0.7%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 2.3e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1921 CCCAGTGTGATTGGA 1938  
DB 1 CCCAGTGTGATTGGA 18  
RESULT 161  
AR292836  
LOCUS 19 bp DNA linear PAT 12-JUN-2003  
DEFINITION Sequence 4571 from patent US 6537751.  
ACCESSION AR292836  
VERSION AR292836.1 GI:31680120  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 19)  
AUTHORS Cohen,D., Chumakov,I. and Blumenfeld,M.  
TITLE Biallelic markers for use in constructing a high density disequilibrium map of the human genome  
JOURNAL Patent: US 6537751-A 4571 25-MAR-2003;  
FEATURES Location/Qualifiers  
source 1..19  
/organism="unknown"  
/mol\_type="genomic DNA"  
Query Match 0.7%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 2.3e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 18 TCCAGACATCACTGTC 35  
DB 1 TCCAGACATCACTGTC 18  
RESULT 162  
AR294431/c  
LOCUS 19 bp DNA linear PAT 12-JUN-2003  
DEFINITION Sequence 6166 from patent US 6537751.  
ACCESSION AR294431  
VERSION AR294431.1 GI:31681715  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 19)  
AUTHORS Cohen,D., Chumakov,I. and Blumenfeld,M.

TITLE Biallelic markers for use in constructing a high density

JOURNAL disequilibrium map of the human genome

Patent: US 6537751-A 6166 25-MAR-2003;

FEATURES Location/Qualifiers

source

1. .19

/organism="unknown"

/mol\_type="genomic DNA"

Query Match 0.7%; Score 14.8; DB 1; Length 19;

Best Local Similarity 88.9%; Pred. No. 2.3e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1813 GGAGGATAAGTTACACTG 1830

Db 19 GGAGGAAGATTACATG 2

RESULT 163

AX255714

LOCUS

AX255714

DEFINITION

Sequence 135 from Patent WO0170982.

ACCESSION

AX255714

VERSION

AX255714.1 GI:16074769

KEYWORDS

synthetic construct

synthetic construct

ORGANISM

other sequences; artificial sequences.

REFERENCE

1

AUTHORS

Beger, C., Barber, J. and Wong-Staal, F.

Brca-1 regulators and methods of use

TITLE

WO 0170982-A 135 27-SEP-2001;

JOURNAL

Immunol Incorporated (US); Beger, Carmela (DE)

FEATURES

source

1. .16

/organism="synthetic construct"

/mol\_type="unassigned DNA"

/db\_xref="taxon:32630"

/note="Synthetic oligonucleotide"

Query Match

Best Local Similarity 0.7%; Score 14.4; DB 1; Length 16;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1626 AACCACTCCAGAGCA 1641

Db 1 AACCACTCCATAGCA 16

RESULT 164

AX648143/c

LOCUS

AX648143

DEFINITION

Sequence 25 from Patent WO02101031.

ACCESSION

AX648143

VERSION

AX648143.1 GI:29150963

KEYWORDS

Homo sapiens (human)

ORGANISM

Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE

1

AUTHORS

de Waziers, I., Couteau, C., Gros, C., Moncion, A. and Beaune, P.

Cyp450-specific dna probes and primers, and biological applications

TITLE

Patent: WO 02101031-A 25 19-DEC-2002;

JOURNAL

INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE (INSERM)

(FR)

FEATURES

source

1. .16

/organism="Homo sapiens"

/mol\_type="unassigned DNA"

/db\_xref="taxon:9606"

Query Match 0.7%; Score 14.4; DB 1; Length 16;

Best Local Similarity 93.8%; Pred. No. 2.1e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1897 GATGGGCTGGCATTCT 1912

Db 16 GATGGGCTAGCATTCT 1

RESULT 165

BD241304/c

LOCUS

BD241304

DEFINITION

Methods and products related to genotyping and DNA analysis.

ACCESSION

BD241304

VERSION

BD241304.1 GI:33051074

KEYWORDS

JP 2002525127-A/251.

SOURCE

Homo sapiens (human)

ORGANISM

Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE

1 (bases 1 to 17)

AUTHORS

Landers, J.E., Jordan, B., Housman, D.E. and Charest, A.

Methods and products related to genotyping and DNA analysis

TITLE

Patent: JP 2002525127-A 251 13-AUG-2002;

JOURNAL

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

COMMENT

OS Homo sapiens (human)

PN JP 2002525127-A/251

PD 13-AUG-2002

PF 24-SEP-1999 JP 2000572407

PR 25-SEP-1998 US 60/101757

PI JOHN E LANDERS, BARBARA JORDAN, DAVID E HOUSMAN, ALAIN CHAREST PC

C12N15/09, C12Q1/68, G01N33/53, G01N33/566, G01N33/58, G01N37/00, PC

G01N37/00.

PC C12N15/00

CC Methods and products related to genotyping and DNA analysis FH

Key source

1. .17

Location/Qualifiers

FT

Location/Qualifiers

1. .17

/organism="Homo sapiens"

/mol\_type="genomic DNA"

/db\_xref="taxon:9606"

Query Match

Best Local Similarity 0.7%; Score 14.4; DB 1; Length 17;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 386 TGTCTTTTGGCATTCT 401

Db 17 TGTCTTTTGTCTATTC 2

RESULT 166

AR185986

LOCUS

AR185986

DEFINITION

Sequence 1474 from patent US 6346398.

ACCESSION

AR185986

VERSION

AR185986.1 GI:20231951

KEYWORDS

Unknown.

ORGANISM

Unknown.

REFERENCE

1 (bases 1 to 17)

AUTHORS

Pavco, P., McSwiggen, J., Stinchcomb, D. and Escobedo, J.

Method and reagent for the treatment of diseases or conditions

TITLE

related to levels of vascular endothelial growth factor receptor

Patent: US 6346398-A 1474 12-FEB-2002;

JOURNAL

Location/Qualifiers

1. .17

/organism="unknown"

/mol\_type="unassigned DNA"

Query Match 0.7%; Score 14.4; DB 1; Length 17;



Best Local Similarity 93.8%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1223 GTGCGCTCACTATGG 1238  
|||||  
Db 1 GTGCGCTCACCATGG 16

RESULT 167  
AR286306 17 bp RNA PAT 10-APR-2003  
LOCUS  
DEFINITION Sequence 678 from patent US 6528640.  
ACCESSION AR286306  
VERSION AR286306.1 GI:29723902  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Beigelman, L.; Burgin, A.; Beaudry, A.; Karpeisky, A.;  
Matulic-Adamic, J.; Sweedler, D. and Zinnen, S.  
TITLE Synthetic ribonucleic acids with RNase activity  
JOURNAL Patent: US 6528640-A 678 04-MAR-2003;  
FEATURES Location/Qualifiers  
source 1..17  
/organism="unknown"  
/mol\_type="unassigned RNA"

Query Match 0.7%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 607 ACTGGGCGAGTGGAGTG 622  
|||||  
Db 1 ACTGGGCGAGTGGAGTG 16

RESULT 168  
AR322617 17 bp RNA PAT 17-AUG-2003  
LOCUS  
DEFINITION Sequence 19 from patent US 6566127.  
ACCESSION AR322617  
VERSION AR322617.1 GI:33708425  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Pavco, P.; McSwiggen, J.A.; Stinchcomb, D.T. and Escobedo, J.  
TITLE Method and reagent for the treatment of diseases or conditions  
related to levels of vascular endothelial growth factor receptor  
JOURNAL Patent: US 6566127-A 19 20-MAY-2003;  
FEATURES Location/Qualifiers  
source 1..17  
/organism="unknown"  
/mol\_type="unassigned RNA"

Query Match 0.7%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1223 GTGCGCTCACTATGG 1238  
|||||  
Db 1 GTGCGCTCACCATGG 16

RESULT 169  
AR326793 17 bp RNA PAT 17-AUG-2003  
LOCUS  
DEFINITION Sequence 4195 from patent US 6566127.  
ACCESSION AR326793  
VERSION AR326793.1 GI:33712601  
KEYWORDS

SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Pavco, P.; McSwiggen, J.A.; Stinchcomb, D.T. and Escobedo, J.  
TITLE Method and reagent for the treatment of diseases or conditions  
related to levels of vascular endothelial growth factor receptor  
JOURNAL Patent: US 6566127-A 4195 20-MAY-2003;  
FEATURES Location/Qualifiers  
source 1..17  
/organism="unknown"  
/mol\_type="unassigned RNA"

Query Match 0.7%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1223 GTGCGCTCACTATGG 1238  
|||||  
Db 2 GTGCGCTCACCATGG 17

RESULT 170  
AR398296 17 bp RNA PAT 18-DEC-2003  
LOCUS  
DEFINITION Sequence 677 from patent US 6617438.  
ACCESSION AR398296  
VERSION AR398296.1 GI:40135992  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Beigelman, L.; Burgin, A.B.; Beaudry, A.; Karpeisky, A.;  
Matulic-Adamic, J.; Sweedler, D. and Zinnen, S.  
TITLE Oligoribonucleotides with enzymatic activity  
JOURNAL Patent: US 6617438-A 677 09-SEP-2003;  
FEATURES Location/Qualifiers  
source 1..17  
/organism="unknown"  
/mol\_type="unassigned RNA"

Query Match 0.7%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 607 ACTGGGCGAGTGGAGTG 622  
|||||  
Db 1 ACTGGGCGAGTGGAGTG 16

RESULT 171  
AR482805 17 bp DNA PAT 14-MAY-2004  
LOCUS  
DEFINITION Sequence 251 from patent US 6703228.  
ACCESSION AR482805  
VERSION AR482805.1 GI:47245328  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Landers, J.; Jordan, B.; Houseman, D.E. and Charest, A.  
TITLE Methods and products related to genotyping and DNA analysis  
JOURNAL Patent: US 6703228-A 251 09-MAR-2004;  
FEATURES Location/Qualifiers  
source 1..17  
/organism="unknown"  
/mol\_type="genomic DNA"

Query Match 0.7%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY      386  TGTCTTTTGGCATTG 401
Db      17  TGTCTTTTGTCAATC 2

RESULT 172
AX578183/c
LOCUS      17 bp      RNA      linear      PAT 10-JAN-2003
DEFINITION Sequence 21 from Patent WO211674.
ACCESSION  AX578183
VERSION     AX578183.1  GI:27647385
KEYWORDS    .
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
REFERENCE   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
AUTHORS     Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
TITLE       Thompson,J., Mcswiggen,J., Mckenzie,T., Ayers,D., Szymkowski,D.E.
JOURNAL     Method and reagent for the inhibition of calcium activated chloride
FEATURES    Channel-1 (Clca-1)
            Patent: WO 0211674-A 21 14-FEB-2002;
            RIBOZYME PHARMACEUTICALS, INC. (US) ; Syntex (U.S.A.) LLC (US) ;
            Thompson, James (US)
            Location/Qualifiers
            source      1..17
                        /organism="Homo sapiens"
                        /mol_type="unassigned RNA"
                        /db_xref="taxon:9606"

Query Match      0.7%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 2.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1590  CTGTGCCAGATGCTGG 1605
Db      17  CTGTGCCAGATGCTTG 2

RESULT 173
AX801981
LOCUS      17 bp      DNA      linear      PAT 24-NOV-2003
DEFINITION Sequence 120 from Patent WO03057913.
ACCESSION  AX801981
VERSION     AX801981.1  GI:38500905
KEYWORDS    .
SOURCE      Phasianus colchicus (ring-necked pheasant)
ORGANISM    Phasianus colchicus
REFERENCE   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
AUTHORS     Archosauria; Aves; Neognathae; Galliformes; Phasianidae;
TITLE       Phasianinae; Phasianus.
JOURNAL     1
            Mahlat,C., Desvarenne,S., Babela,O., Lacroix,B. and bello Pigem,N.
            Method for the detection and/or identification of the original
            animal species in animal matter contained in a sample
            Patent: WO 03057913-A 120 17-JUL-2003;
            BIO MERIEUX (FR)
            Location/Qualifiers
            source      1..17
                        /organism="Phasianus colchicus"
                        /mol_type="unassigned DNA"
                        /db_xref="taxon:9054"

Query Match      0.7%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 2.3e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1009  AACATGGAGTCGTC 1024
Db      2  AACACTGGAGTCGTC 17

RESULT 174
AR073430
LOCUS      18 bp      DNA      linear      PAT 28-AUG-2000
DEFINITION Sequence 70 from patent US 5951455.
ACCESSION  AR073430
VERSION     AR073430.1  GI:10000194
KEYWORDS    .
SOURCE      Unknown.
ORGANISM    Unknown.
REFERENCE   Unclassified.
AUTHORS     1 (bases 1 to 18)
TITLE       Cowsert,L.M.
JOURNAL     Antisense modulation of G-alpha-11 expression
FEATURES    Patent: US 5951455-A 70 14-SEP-1999;
            Location/Qualifiers
            source      1..18
                        /organism="unknown"
                        /mol_type="unassigned DNA"

Query Match      0.7%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 2.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      5  GGCTTTGCTGTCCTCC 20
Db      3  GGCTTTGCTCTCCTCC 18

RESULT 175
BD250754
LOCUS      18 bp      DNA      linear      PAT 17-JUL-2003
DEFINITION Identification of genetic targets for modulation by
            oligonucleotides and generation of oligonucleotides for gene
            modulation.
ACCESSION  BD250754
VERSION     BD250754.1  GI:33060524
KEYWORDS    JP 2002511276-A/308.
SOURCE      synthetic construct
ORGANISM    other sequences; artificial sequences.
REFERENCE   1 (bases 1 to 18)
AUTHORS     Cowsert,L.M., Baker,B.F., Mcneil,J., Freier,S.M., Sasnor,H.M.,
            Brooks,D.G., Ohasi,C., Wyatt,J.R., Borchers,A.H. and Vikkars,T.A.
            Identification of genetic targets for modulation by
            oligonucleotides and generation of oligonucleotides for gene
            modulation
            Patent: JP 2002511276-A 308 16-APR-2002;
            ISIS PHARMACEUTICALS INC
            OS Artificial Sequence
            PN JP 2002511276-A/308
            PD 16-APR-2002
            PF 13-APR-1999 JP 2000543647
            PR 13-APR-1998 US 60/081483,28-APR-1998 US 09/067638 PI
            LEX M COWSERT,BRENDA F BAKER,JOHN MCNEIL,SUSAN M FREIER,HENRI PI
            M SASNOR,
            PI DOUGLAS G BROOKS,CARA OHASI,JACQUELINE R WYATT,ALEXANDER H PI
            BORCHERS.
            PI TIMOTHY A VIKKARS
            PC C12N15/09,C07B61/00,C07B61/00,C12Q1/68,G06F17/30,G06F17/50, PC
            C12N15/00
            CC Antisense Oligonucleotide
            FH Key Location/Qualifiers
            FT source      1..18
                        /organism='Artificial Sequence'.
            FT Location/Qualifiers
            source      1..18
                        /organism="synthetic construct"
                        /mol_type="genomic DNA"
                        /db_xref="taxon:32630"

Query Match      0.7%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 2.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

QY 5 GGCTTTGCTCTCTCC 20  
Db 3 GGCTTTGCTCTCTCC 18

RESULT 176  
A91513/c  
LOCUS A91513 19 bp DNA linear PAT 22-JAN-2000  
DEFINITION Sequence 40 from Patent WO9824928.  
ACCESSION A91513  
VERSION A91513.1 GI:6740468  
KEYWORDS unidentified  
SOURCE unidentified  
ORGANISM unclassified.

REFERENCE 1 (bases 1 to 19)  
AUTHORS Pallisgaard,N. and Hokland,P.  
TITLE DETECTION OF CHROMOSOMAL ABNORMALITIES  
JOURNAL Patent: WO 9824928-A 40 11-JUN-1998;  
PALLISGAARD NIELS (DK); HOKLAND PETER (DK)  
FEATURES  
source  
1..19  
/organism="unidentified"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32644"

Query Match 0.7%; Score 14.4; DB 1; Length 19;  
Best Local Similarity 93.8%; Pred. No. 2.6e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1899 TGGGCTGGCATTTCTG 1914  
Db 16 TGGGCTGGCATTTCTG 1

RESULT 177  
AR089229  
LOCUS AR089229 19 bp DNA linear PAT 07-SEP-2000  
DEFINITION Sequence 18 from patent US 5994062.  
ACCESSION AR089229  
VERSION AR089229.1 GI:10015986  
KEYWORDS Unknown.  
SOURCE Unknown.  
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 19)  
AUTHORS Mulshine,J.L. and Tockman,M.S.  
TITLE Epithelial protein and DNA thereof for use in early cancer  
JOURNAL Patent: US 5994062-A 18 30-NOV-1999;  
FEATURES  
source  
1..19  
/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 0.7%; Score 14.4; DB 1; Length 19;  
Best Local Similarity 93.8%; Pred. No. 2.6e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1879 CAGCATCACCTCAGC 1894  
Db 4 CAGCATCAACCTCAGC 19

RESULT 178  
AR158373  
LOCUS AR158373 19 bp DNA linear PAT 17-OCT-2001  
DEFINITION Sequence 18 from patent US 6251586.  
ACCESSION AR158373  
VERSION AR158373.1 GI:16220395  
KEYWORDS Unknown.  
SOURCE Unknown.

ORGANISM Unknown.  
Unclassified.  
REFERENCE 1 (bases 1 to 19)  
AUTHORS Mulshine,J.L. and Tockman,M.S.  
TITLE Methods for diagnosing cancer or precancer based upon hnRNP protein  
expression  
JOURNAL Patent: US 6500625-A 18 31-DEC-2002;  
FEATURES  
source  
1..19  
/organism="unknown"  
/mol\_type="unassigned DNA"

ORGANISM Unknown.  
Unclassified.  
REFERENCE 1 (bases 1 to 19)  
AUTHORS Mulshine,J.L. and Tockman,M.S.  
TITLE Epithelial protein and DNA thereof for use in early cancer  
JOURNAL Patent: US 6251586-A 18 26-JUN-2001;  
FEATURES  
source  
1..19  
/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 0.7%; Score 14.4; DB 1; Length 19;  
Best Local Similarity 93.8%; Pred. No. 2.6e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1879 CAGCATCACCTCAGC 1894  
Db 4 CAGCATCAACCTCAGC 19

RESULT 179  
CQ819388  
LOCUS CQ819388 19 bp DNA linear PAT 14-JUN-2004  
DEFINITION Sequence 18 from Patent EP1426381.  
ACCESSION CQ819388  
VERSION CQ819388.1 GI:48714933  
KEYWORDS Homo sapiens (human)  
SOURCE Homo sapiens  
ORGANISM Homo sapiens

REFERENCE 1  
AUTHORS Tockman,M.  
TITLE An epithelial protein and DNA thereof for use in early cancer  
JOURNAL Patent: EP 1426381-A 18 09-JUN-2004;  
THE GOVERNMENT OF THE UNITED STATES OF AMERICA, DEPARTMENT OF  
HEALTH AND HUMAN SERVICES (US); JOHNS HOPKINS UNIVERSITY (US)  
FEATURES  
source  
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/organism="Homo sapiens"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:9606"

Query Match 0.7%; Score 14.4; DB 1; Length 19;  
Best Local Similarity 93.8%; Pred. No. 2.6e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1879 CAGCATCACCTCAGC 1894  
Db 4 CAGCATCAACCTCAGC 19

RESULT 180  
AR268786  
LOCUS AR268786 19 bp DNA linear PAT 10-APR-2003  
DEFINITION Sequence 18 from patent US 6500625.  
ACCESSION AR268786  
VERSION AR268786.1 GI:29699411  
KEYWORDS Unknown.  
SOURCE Unknown.  
ORGANISM Unknown.

REFERENCE 1 (bases 1 to 19)  
AUTHORS Mulshine,J.L. and Tockman,M.S.  
TITLE Methods for diagnosing cancer or precancer based upon hnRNP protein  
expression  
JOURNAL Patent: US 6500625-A 18 31-DEC-2002;  
FEATURES  
source  
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/organism="unknown"  
/mol\_type="unassigned DNA"

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Query Match          0.7%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 2.6e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1879 CAGCATCACCTCAGC 1894
      |||||
Db 4 CAGCATCAACCTCAGC 19

RESULT 181
LOCUS AR295012 19 bp DNA linear PAT 12-JUN-2003
DEFINITION Sequence 6747 from patent US 6537751.
ACCESSION AR295012
VERSION AR295012.1 GI:31682296
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS Cohen,D., Chumakov,I. and Blumenfeld,M.
TITLE Biallelic markers for use in constructing a high density
JOURNAL disequilibrium map of the human genome
PATENT: US 6537751-A 6747 25-MAR-2003;
FEATURES
source
1..19
/organism="unknown"
/mol_type="genomic DNA"

Query Match          0.7%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 2.6e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1204 CTTTCAGAGTACAAAT 1219
      |||||
Db 2 CTTTCAGAGTACCAAT 17

RESULT 182
LOCUS AR562204 19 bp DNA linear PAT 08-OCT-2004
DEFINITION Sequence 15 from patent US 6759217.
ACCESSION AR562204
VERSION AR562204.1 GI:53976108
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS Koprski,M.S.
TITLE Method enabling use of extracellular RNA extracted from plasma or
JOURNAL serum to detect, monitor or evaluate cancer
PATENT: US 6759217-A 15 06-JUL-2004;
FEATURES
source
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/organism="unknown"
/mol_type="genomic DNA"

Query Match          0.7%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 2.6e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1879 CAGCATCACCTCAGC 1894
      |||||
Db 4 CAGCATCAACCTCAGC 19

RESULT 183
LOCUS AX440584/C 19 bp DNA linear PAT 28-JUN-2002
DEFINITION Sequence 88 from Patent WO0206529.
ACCESSION AX440584
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VERSION AX440584.1 GI:21665385
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.

REFERENCE
AUTHORS Germino,G.G., Watnick,T.J. and Phakdeekitcharoen,B.
TITLE Detection and treatment of polycystic kidney disease
JOURNAL Patent: WO 0206529-A 88 24-JAN-2002;
The Johns Hopkins University School of Medicine (US)
FEATURES
source
1..19
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="PCR primer 15P5"

Query Match          0.7%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 2.6e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1447 CACATTGGTGGCCGGG 1462
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Db 17 CACATTGGTGGCCGGT 2

RESULT 184
LOCUS BD023295/c 19 bp DNA linear PAT 27-AUG-2002
DEFINITION Method for detecting abnormality in chromosome.
ACCESSION BD023295
VERSION BD023295.1 GI:22564518
KEYWORDS JP 2001505428-A/40.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE
AUTHORS Parigard,N. and Hukurando,P.
TITLE Method for detecting abnormality in chromosome
JOURNAL Patent: JP 2001505428-A 40 24-APR-2001;
NEILLS PARIGARD
COMMENT PN JP 2001505428-A/40
PD 24-APR-2001
PF 08-DEC-1997 JP 1998525090
PI NEILLS PARIGARD,PATER HOKURANDO
PC C12N15/09,C12Q1/68,G01N33/50,C12N15/00
CC Strandedness: Single;
CC Topology: Linear;
CC /desc = 'DNA (synthetic)';
FH Key Location/Qualifiers.
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source
1..19
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"

Query Match          0.7%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 2.6e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1899 TGGGCTGGCATTCTTG 1914
      |||||
Db 16 TGGGCTGGCTTCTTG 1

RESULT 185
LOCUS BD137821 14 bp DNA linear PAT 18-SEP-2002
DEFINITION Protein encoded by polynucleic acid of porcine reproductive and
ACCESSION respiratory syndrome virus (PRRSV).
BD137821
VERSION BD137821.1 GI:23232766
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KEYWORDS      JP 2002504317-A/106.
SOURCE         synthetic construct
ORGANISM       other sequences; artificial sequences.
REFERENCE      1 (bases 1 to 14)
AUTHORS        Paul, P.S. and Zhang, Y.
TITLE          Protein encoded by polynucleic acid of porcine reproductive and
              respiratory syndrome virus (PRRSV)
JOURNAL        Patent: JP 2002504317-A 106 12-FEB-2002;
              IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC, AMERICAN CYANAMID CO
COMMENT        OS Artificial Sequence
              PN JP 2002504317-A/106
              PD 12-FEB-2002
              PF 08-FEB-1999 JP 2000530103
              PR 06-FEB-1998 US 09/019793
              PI PREM S PAUL, YANJIN ZHANG
              PC C12N15/09, A61K39/12, A61P31/14, C07K14/08, C12Q1/68//C07K16/10,
              PC C12N15/00
              CC Description of Artificial Sequence: Synthetic DNA FH Key
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              FT /organism='Artificial Sequence'.
FEATURES       source
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              /organism="synthetic construct"
              /mol_type="genomic DNA"
              /db_xref="taxon:32630"
Query Match 0.7%; Score 14; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 2e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 256 AGTGTGCGTCAACT 269
Db 1 AGTGTGCGTCAACT 14
RESULT 186
BD137824
LOCUS         14 bp DNA linear PAT 18-SEP-2002
DEFINITION   Protein encoded by polynucleic acid of porcine reproductive and
              respiratory syndrome virus (PRRSV).
ACCESSION    BD137824.1 GI:23232769
VERSION      JP 2002504317-A/109.
KEYWORDS     synthetic construct
SOURCE       synthetic construct
ORGANISM     other sequences; artificial sequences.
REFERENCE    1 (bases 1 to 14)
AUTHORS      Paul, P.S. and Zhang, Y.
TITLE        Protein encoded by polynucleic acid of porcine reproductive and
              respiratory syndrome virus (PRRSV)
JOURNAL      Patent: JP 2002504317-A 109 12-FEB-2002;
              IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC, AMERICAN CYANAMID CO
COMMENT      OS Artificial Sequence
              PN JP 2002504317-A/109
              PD 12-FEB-2002
              PF 08-FEB-1999 JP 2000530103
              PR 06-FEB-1998 US 09/019793
              PI PREM S PAUL, YANJIN ZHANG
              PC C12N15/09, A61K39/12, A61P31/14, C07K14/08, C12Q1/68//C07K16/10,
              PC C12N15/00
              CC Description of Artificial Sequence: Synthetic DNA FH Key
              FT Location/Qualifiers
              FT source 1..14
              FT /organism='Artificial Sequence'.
FEATURES       source
              1..14
              /organism="synthetic construct"
              /mol_type="genomic DNA"
              /db_xref="taxon:32630"
Query Match 0.7%; Score 14; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 2e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 372 CAACTGTTTGTAGCC 385
Db 1 CAACTGTTTGTAGCC 14
RESULT 187
BD137827
LOCUS         14 bp DNA linear PAT 18-SEP-2002
DEFINITION   Protein encoded by polynucleic acid of porcine reproductive and
              respiratory syndrome virus (PRRSV).
ACCESSION    BD137827.1 GI:23232772
VERSION      JP 2002504317-A/112.
KEYWORDS     synthetic construct
SOURCE       synthetic construct
ORGANISM     other sequences; artificial sequences.
REFERENCE    1 (bases 1 to 14)
AUTHORS      Paul, P.S. and Zhang, Y.
TITLE        Protein encoded by polynucleic acid of porcine reproductive and
              respiratory syndrome virus (PRRSV)
JOURNAL      Patent: JP 2002504317-A 112 12-FEB-2002;
              IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC, AMERICAN CYANAMID CO
COMMENT      OS Artificial Sequence
              PN JP 2002504317-A/112
              PD 12-FEB-2002
              PF 08-FEB-1999 JP 2000530103
              PR 06-FEB-1998 US 09/019793
              PI PREM S PAUL, YANJIN ZHANG
              PC C12N15/09, A61K39/12, A61P31/14, C07K14/08, C12Q1/68//C07K16/10,
              PC C12N15/00
              CC Description of Artificial Sequence: Synthetic DNA FH Key
              FT Location/Qualifiers
              FT source 1..14
              FT /organism='Artificial Sequence'.
FEATURES       source
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              /organism="synthetic construct"
              /mol_type="genomic DNA"
              /db_xref="taxon:32630"
Query Match 0.7%; Score 14; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 2e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 982 CTACCCCTGTACC 995
Db 1 CTACCCCTGTACC 14
RESULT 188
BD137830
LOCUS         14 bp DNA linear PAT 18-SEP-2002
DEFINITION   Protein encoded by polynucleic acid of porcine reproductive and
              respiratory syndrome virus (PRRSV).
ACCESSION    BD137830.1 GI:23232775
VERSION      JP 2002504317-A/115.
KEYWORDS     synthetic construct
SOURCE       synthetic construct
ORGANISM     other sequences; artificial sequences.
REFERENCE    1 (bases 1 to 14)
AUTHORS      Paul, P.S. and Zhang, Y.
TITLE        Protein encoded by polynucleic acid of porcine reproductive and
              respiratory syndrome virus (PRRSV)
JOURNAL      Patent: JP 2002504317-A 115 12-FEB-2002;
              IOWA STATE UNIVERSITY RESEARCH FOUNDATION INC, AMERICAN CYANAMID CO
COMMENT      OS Artificial Sequence
              PN JP 2002504317-A/115
              PD 12-FEB-2002
              PF 08-FEB-1999 JP 2000530103
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PR 06-FEB-1998 US 09/019793
PI PREM S PAUL,YANJIN ZHANG
PC C12N15/09,A61K39/12,A61P31/14,C07K14/08,C12Q1/68//C07K16/10,
PC C12N15/00
CC Description of Artificial Sequence:Synthetic DNA FH Key
FT Location/Qualifiers
FT source 1.14
FT Location/Qualifiers
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source
1.14
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

Query Match 0.7%; Score 14; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 2e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1390 GGCAATGATAACC 1403
Db 1 GGCAATGATAACC 14

RESULT 189
AX263932/c
LOCUS AX263932 17 bp DNA linear PAT 26-OCT-2001
DEFINITION Sequence 1323 from Patent WO0173002.
ACCESSION AX263932
VERSION AX263932.1 GI:16512731
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
1
AUTHORS Kniec,E.B., Gamper,H.B. and Rice,M.C.
TITLE Targeted chromosomal genomic alterations with modified single
stranded oligonucleotides
JOURNAL Patent: WO 0173002-A 1323 04-OCT-2001;
UNIVERSITY OF DELAWARE (US)
FEATURES
source
1.17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.7%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 2.5e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1571 TGGCCAGCCAGTCA 1584
Db 17 TGGCCAGCCAGTCA 4

RESULT 190
AX263933
LOCUS AX263933 17 bp DNA linear PAT 26-OCT-2001
DEFINITION Sequence 1324 from Patent WO0173002.
ACCESSION AX263933
VERSION AX263933.1 GI:16512732
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
1
AUTHORS Kniec,E.B., Gamper,H.B. and Rice,M.C.
TITLE Targeted chromosomal genomic alterations with modified single
stranded oligonucleotides
JOURNAL Patent: WO 0173002-A 1324 04-OCT-2001;
UNIVERSITY OF DELAWARE (US)
FEATURES
Location/Qualifiers

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source
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/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.7%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 2.5e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1571 TGGCCAGCCAGTCA 1584
Db 1 TGGCCAGCCAGTCA 14

RESULT 191
AX263936/c
LOCUS AX263936 17 bp DNA linear PAT 26-OCT-2001
DEFINITION Sequence 1327 from Patent WO0173002.
ACCESSION AX263936
VERSION AX263936.1 GI:16512735
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
1
AUTHORS Kniec,E.B., Gamper,H.B. and Rice,M.C.
TITLE Targeted chromosomal genomic alterations with modified single
stranded oligonucleotides
JOURNAL Patent: WO 0173002-A 1327 04-OCT-2001;
UNIVERSITY OF DELAWARE (US)
FEATURES
Location/Qualifiers
source
1.17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.7%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 2.5e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1571 TGGCCAGCCAGTCA 1584
Db 14 TGGCCAGCCAGTCA 1

RESULT 192
AX263937
LOCUS AX263937 17 bp DNA linear PAT 26-OCT-2001
DEFINITION Sequence 1328 from Patent WO0173002.
ACCESSION AX263937
VERSION AX263937.1 GI:16512736
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
1
AUTHORS Kniec,E.B., Gamper,H.B. and Rice,M.C.
TITLE Targeted chromosomal genomic alterations with modified single
stranded oligonucleotides
JOURNAL Patent: WO 0173002-A 1328 04-OCT-2001;
UNIVERSITY OF DELAWARE (US)
FEATURES
Location/Qualifiers
source
1.17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.7%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 2.5e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1571 TGGCCAGCCAGTCA 1584
Db 14 TGGCCAGCCAGTCA 1

RESULT 193
AX263938
LOCUS AX263938 17 bp DNA linear PAT 26-OCT-2001
DEFINITION Sequence 1329 from Patent WO0173002.
ACCESSION AX263938
VERSION AX263938.1 GI:16512737
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
1
AUTHORS Kniec,E.B., Gamper,H.B. and Rice,M.C.
TITLE Targeted chromosomal genomic alterations with modified single
stranded oligonucleotides
JOURNAL Patent: WO 0173002-A 1329 04-OCT-2001;
UNIVERSITY OF DELAWARE (US)
FEATURES
Location/Qualifiers

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QY 1571 TGGCCAGCCAGTCA 1584  
Db 4 TGGCCAGCCAGTCA 17

RESULT 193  
AX578746/c  
LOCUS AX578746 17 bp RNA linear PAT 10-JAN-2003  
DEFINITION Sequence 584 from Patent WO0211674.  
ACCESSION AX578746  
KEYWORDS AX578746.1 GI:27647948  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
REFERENCE 1  
AUTHORS Thompson,J., Mcswiggen,J., Mckenzie,T., Ayers,D., Szymkowski,D.E.  
and Grupe,A.  
TITLE Method and reagent for the inhibition of calcium activated chloride  
channel-1 (clca-1)  
JOURNAL Patent: WO 0211674-A 584 14-FEB-2002;  
RIBOZYME PHARMACEUTICALS, INC. (US) ; Syntex (U.S.A.) LLC (US) ;  
Thompson, James (US)  
FEATURES  
source Location/Qualifiers  
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/organism="Homo sapiens"  
/mol\_type="unassigned RNA"  
/db\_xref="taxon:9606"

Query Match 0.7%; Score 14; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 2.5e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1586 TCAGCTGTGCCAG 1599  
Db 14 TCAGCTGTGCCAG 1

RESULT 194  
A61305  
LOCUS A61305 18 bp DNA linear PAT 09-MAR-1998  
DEFINITION Sequence 17 from Patent WO9709452.  
ACCESSION A61305  
KEYWORDS A61305.1 GI:3715719  
SOURCE unidentified  
ORGANISM unidentified  
REFERENCE 1  
AUTHORS Petrik,J.  
TITLE SYSTEMATIC EXTRACTION, AMPLIFICATION AND DETECTION OF RETROVIRAL  
SEQUENCES, AND OLIGONUCLEOTIDES FOR USE THEREIN  
JOURNAL Patent: WO 9709452-A 17 13-MAR-1997;  
UNIV CAMBRIDGE TECH (GB)  
FEATURES  
source Location/Qualifiers  
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/organism="unidentified"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32644"

Query Match 0.7%; Score 14; DB 1; Length 18;  
Best Local Similarity 77.8%; Pred. No. 2.7e+02;  
Matches 14; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 1869 ATCCGCGTCACAGCATCA 1886  
Db 1 ATCYGAGTCACRGACCA 18

RESULT 195  
A61329/c  
LOCUS A61329 18 bp DNA linear PAT 09-MAR-1998

DEFINITION Sequence 41 from Patent WO9709452.  
ACCESSION A61329  
VERSION A61329.1 GI:3715743  
KEYWORDS unidentified  
SOURCE unidentified  
ORGANISM unclassified.  
REFERENCE 1  
AUTHORS Petrik,J.  
TITLE SYSTEMATIC EXTRACTION, AMPLIFICATION AND DETECTION OF RETROVIRAL  
SEQUENCES, AND OLIGONUCLEOTIDES FOR USE THEREIN  
JOURNAL Patent: WO 9709452-A 41 13-MAR-1997;  
UNIV CAMBRIDGE TECH (GB)  
FEATURES  
source Location/Qualifiers  
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/organism="unidentified"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32644"

Query Match 0.7%; Score 14; DB 1; Length 18;  
Best Local Similarity 77.8%; Pred. No. 2.7e+02;  
Matches 14; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 1869 ATCCGCGTCACAGCATCA 1886  
Db 18 ATCYGAGTCACRGACCA 1

RESULT 196  
AR016234/c  
LOCUS AR016234 18 bp DNA linear PAT 05-DEC-1998  
DEFINITION Sequence 122 from patent US 5776682.  
ACCESSION AR016234  
VERSION AR016234.1 GI:3972511  
KEYWORDS Unknown.  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS First,M,Kent., Agoulnik,A.I. and Muallem,A.  
TITLE Male infertility y-deletion detection battery  
JOURNAL Patent: US 5776682-A 122 07-JUL-1998;  
FEATURES  
source Location/Qualifiers  
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/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 0.7%; Score 14; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1560 AAGAAGGGGGATGG 1573  
Db 17 AAGAAGGGGGATGG 4

RESULT 197  
AR035649/c  
LOCUS AR035649 18 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 81 from patent US 5871920.  
ACCESSION AR035649  
VERSION AR035649.1 GI:5952317  
KEYWORDS Unknown.  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Page,D.C. and Reijo,R.  
TITLE Daz: a gene associated with azoospermia  
JOURNAL Patent: US 5871920-A 81 16-FEB-1999;  
FEATURES  
source Location/Qualifiers  
1..18  
/organism="unknown"

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/mol_type="unassigned DNA"

Query Match          0.7%; Score 14; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1560 AAGAAGGGGGATGG 1573
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Db 17 AAGAGGGGGATGG 4

RESULT 198
LOCUS AR100814 18 bp DNA linear PAT 14-FEB-2001
DEFINITION Sequence 17 from patent US 6083685.
ACCESSION AR100814
VERSION AR100814.1 GI:12811612
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 18)
AUTHORS Petrlik,J.
TITLE Systematic extraction, amplification and detection of retroviral
JOURNAL Patent: US 6083685-A 17 04-JUL-2000;
FEATURES
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    /organism="unknown"
    /mol_type="unassigned DNA"

Query Match          0.7%; Score 14; DB 1; Length 18;
Best Local Similarity 77.8%; Pred. No. 2.7e+02;
Matches 14; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 1869 ATCCGCGTCACAGCATCA 1886
    |||:|||||
Db 1 ATCYGAGTCACRGACCA 18

RESULT 199
LOCUS AR100838/c 18 bp DNA linear PAT 14-FEB-2001
DEFINITION Sequence 41 from patent US 6083685.
ACCESSION AR100838
VERSION AR100838.1 GI:12811636
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 18)
AUTHORS Petrlik,J.
TITLE Systematic extraction, amplification and detection of retroviral
JOURNAL Patent: US 6083685-A 41 04-JUL-2000;
FEATURES
    source
    1..18
    /organism="unknown"
    /mol_type="unassigned DNA"

Query Match          0.7%; Score 14; DB 1; Length 18;
Best Local Similarity 77.8%; Pred. No. 2.7e+02;
Matches 14; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 1869 ATCCGCGTCACAGCATCA 1886
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Db 18 ATCYGAGTCACRGACCA 1

RESULT 200
LOCUS BD241463/c 17 bp DNA linear PAT 17-JUL-2003
DEFINITION Methods and products related to genotyping and DNA analysis.
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ACCESSION BD241463
VERSION BD241463.1 GI:33051233
KEYWORDS JP 2002525127-A/410.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens

REFERENCE 1 (bases 1 to 17)
AUTHORS Landers,J.E., Jordan,B., Housman,D.E. and Charest,A.
TITLE Methods and products related to genotyping and DNA analysis
JOURNAL Patent: JP 2002525127-A 410 13-AUG-2002;
COMMENT OS Homo sapiens (human)
PN JP 2002525127-A/410
PD 13-AUG-2002
PF 24-SEP-1999 JP 2000572407
PR 25-SEP-1998 US 60/101757
PI JOHN E LANDERS,BARBARA JORDAN,DAVID E HOUSMAN,ALAIN CHAREST PC
C12N15/09,C12Q1/68,G01N33/53,G01N33/566,G01N33/58,G01N37/00, PC
G01N37/00.
PC C12N15/00
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Db 17 TCACGTCGGGTACGTG 1

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LOCUS BD241515 17 bp DNA linear PAT 17-JUL-2003
DEFINITION Methods and products related to genotyping and DNA analysis.
ACCESSION BD241515
VERSION BD241515.1 GI:33051285
KEYWORDS JP 2002525127-A/462.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE 1 (bases 1 to 17)
AUTHORS Landers,J.E., Jordan,B., Housman,D.E. and Charest,A.
TITLE Methods and products related to genotyping and DNA analysis
JOURNAL Patent: JP 2002525127-A 462 13-AUG-2002;
COMMENT OS Homo sapiens (human)
PN JP 2002525127-A/462
PD 13-AUG-2002
PF 24-SEP-1999 JP 2000572407
PR 25-SEP-1998 US 60/101757
PI JOHN E LANDERS,BARBARA JORDAN,DAVID E HOUSMAN,ALAIN CHAREST PC
C12N15/09,C12Q1/68,G01N33/53,G01N33/566,G01N33/58,G01N37/00, PC
G01N37/00.
PC C12N15/00
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Db 1 TCACGTTCCGGGTACGTG 17

RESULT 202  
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DEFINITION Methods and products related to genotyping and DNA analysis.  
ACCESSION BD241557  
VERSION BD241557.1 GI:33051327  
KEYWORDS JP 2002525127-A/504.  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.  
AUTHORS Landers J.E., Jordan B., Housman, D.R. and Charest, A.  
TITLE Methods and products related to genotyping and DNA analysis  
JOURNAL Patent: JP 2002525127-A 504 13-AUG-2002;  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
COMMENT OS Homo sapiens (human)  
PN JP 2002525127-A/504  
PD 13-AUG-2002  
PF 24-SEP-1999 JP 2000572407  
PR 25-SEP-1998 US 60/101757  
PI JOHN E LANDERS, BARBARA JORDAN, DAVID E HOUSMAN, ALAIN CHAREST PC  
C12N15/09, C12Q1/68, G01N33/53, G01N33/566, G01N33/58, G01N37/00, PC  
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Db 1 TCACGTTCCGGGTACGTG 17

RESULT 203  
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LOCUS I36663 17 bp DNA linear PAT 13-MAY-1997  
DEFINITION Sequence 7 from patent US 5607924.  
ACCESSION I36663  
VERSION I36663.1 GI:2086488  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Magda, D., Sessler, J.L., Iverson, B.L., Sansom, P.I. and Wright, M.  
TITLE DNA photocleavage using texaphyrins  
JOURNAL Patent: US 5607924-A 7 04-MAR-1997;  
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RESULT 204  
AR186231  
LOCUS AR186231 17 bp DNA linear PAT 20-APR-2002  
DEFINITION Sequence 1719 from patent US 6346398.  
ACCESSION AR186231  
VERSION AR186231.1 GI:20232196  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Pavco, P., McSwiggen, J., Stinchcomb, D. and Escobedo, J.  
TITLE Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor  
JOURNAL Patent: US 6346398-A 1719 12-FEB-2002;  
FEATURES  
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Db 1 ACCCTGTAAACCAAT 17

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LOCUS AR322862 17 bp RNA linear PAT 17-AUG-2003  
DEFINITION Sequence 264 from patent US 6566127.  
ACCESSION AR322862  
VERSION AR322862.1 GI:33708670  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.  
TITLE Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor  
JOURNAL Patent: US 6566127-A 264 20-MAY-2003;  
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Db 1 ACCCTGTAAACCAAT 17

RESULT 206  
AR326950/c  
LOCUS AR326950 17 bp RNA linear PAT 17-AUG-2003  
DEFINITION Sequence 4352 from patent US 6566127.  
ACCESSION AR326950

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VERSION AR326950.1 GI:33712758
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 17)
AUTHORS Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
TITLE Method and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor
JOURNAL Patent: US 6566127-A 4352 20-MAY-2003;
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QY 597 AATAAATTGACTGGGC 613
Db 17 AAGTAATTGACTGGGC 1

RESULT 207
AR327749
LOCUS AR327749 17 bp RNA linear PAT 17-AUG-2003
DEFINITION Sequence 5151 from patent US 6566127.
ACCESSION AR327749
VERSION AR327749.1 GI:33713557
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 17)
AUTHORS Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
TITLE Method and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor
JOURNAL Patent: US 6566127-A 5151 20-MAY-2003;
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QY 1666 AGAAMAACCGGAGAG 1682
Db 1 AGAAMAACCGGAGAG 17

RESULT 208
AR482964/c
LOCUS AR482964 17 bp DNA linear PAT 14-MAY-2004
DEFINITION Sequence 410 from patent US 6703228.
ACCESSION AR482964
VERSION AR482964.1 GI:47245487
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 17)
AUTHORS Landers,J., Jordan,B., Housman,D.E. and Charest,A.
TITLE Methods and products related to genotyping and DNA analysis
JOURNAL Patent: US 6703228-A 410 09-MAR-2004;
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RESULT 210
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DEFINITION Sequence 504 from patent US 6703228.
ACCESSION AR483058
VERSION AR483058.1 GI:47245581
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 17)
AUTHORS Landers,J., Jordan,B., Housman,D.E. and Charest,A.
TITLE Methods and products related to genotyping and DNA analysis
JOURNAL Patent: US 6703228-A 504 09-MAR-2004;
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QY 1176 TCACCTTCGGGTACATG 1192
Db 1 TCACCTTCGGGTACATG 17

RESULT 211
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LOCUS AX216359 17 bp RNA linear PAT 07-SEP-2001
DEFINITION Sequence 1801 from Patent WO0159103.
ACCESSION AX216359
VERSION AX216359.1 GI:15526420
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
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RESULT 209
AR483016
LOCUS AR483016 17 bp DNA linear PAT 14-MAY-2004
DEFINITION Sequence 462 from patent US 6703228.
ACCESSION AR483016
VERSION AR483016.1 GI:47245539
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 17)
AUTHORS Landers,J., Jordan,B., Housman,D.E. and Charest,A.
TITLE Methods and products related to genotyping and DNA analysis
JOURNAL Patent: US 6703228-A 462 09-MAR-2004;
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RESULT 210
AR483058
LOCUS AR483058 17 bp DNA linear PAT 14-MAY-2004
DEFINITION Sequence 504 from patent US 6703228.
ACCESSION AR483058
VERSION AR483058.1 GI:47245581
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 17)
AUTHORS Landers,J., Jordan,B., Housman,D.E. and Charest,A.
TITLE Methods and products related to genotyping and DNA analysis
JOURNAL Patent: US 6703228-A 504 09-MAR-2004;
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QY 1176 TCACCTTCGGGTACATG 1192
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RESULT 211
AX216359/c
LOCUS AX216359 17 bp RNA linear PAT 07-SEP-2001
DEFINITION Sequence 1801 from Patent WO0159103.
ACCESSION AX216359
VERSION AX216359.1 GI:15526420
KEYWORDS
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ORGANISM synthetic construct
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**Degitz, Klaus Karl (DE) : Besch. Robert (DE)**

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QY 1890 TCAGCATGATGGCGTGG 1906
Db 17 TCAGCTTGATGGCTGG 1

RESULT 216
AX422248
LOCUS AX422248 17 bp RNA linear PAT 18-JUN-2002
DEFINITION Sequence 584 from Patent WO0188124.
ACCESSION AX422248
VERSION AX422248.1 GI:21525630
KEYWORDS .
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE 1
AUTHORS Jarvis,T., von Carlowitz,I., Mcswiggen,J.A., McLaughlin,F.G. and
Randi,A.M.
TITLE Method and reagent for the inhibition of erg
JOURNAL Patent: WO 0188124-A 584 22-NOV-2001;
RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)
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QY 1887 CCTCAGCATGATGGCG 1903
Db 1 CCTCAGCAGGATTGGC 17

RESULT 217
AX423478
LOCUS AX423478 17 bp RNA linear PAT 18-JUN-2002
DEFINITION Sequence 1814 from Patent WO0188124.
ACCESSION AX423478
VERSION AX423478.1 GI:21526860
KEYWORDS .
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE 1
AUTHORS Jarvis,T., von Carlowitz,I., Mcswiggen,J.A., McLaughlin,F.G. and
Randi,A.M.
TITLE Method and reagent for the inhibition of erg
JOURNAL Patent: WO 0188124-A 1814 22-NOV-2001;
RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)
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QY 1888 CCTCAGCATGATGGCT 1904
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Best Local Similarity 88.2%; Pred. No. 2.6e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Db 17 TCAGCTTGATGGCTGG 1

RESULT 218
AX423479
LOCUS AX423479 17 bp RNA linear PAT 18-JUN-2002
DEFINITION Sequence 1815 from Patent WO0188124.
ACCESSION AX423479
VERSION AX423479.1 GI:21526861
KEYWORDS .
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE 1
AUTHORS Jarvis,T., von Carlowitz,I., Mcswiggen,J.A., McLaughlin,F.G. and
Randi,A.M.
TITLE Method and reagent for the inhibition of erg
JOURNAL Patent: WO 0188124-A 1815 22-NOV-2001;
RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)
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QY 1889 CTCAGCATGATGGCGTG 1905
Db 1 CTCAGCAGGATTGGCTG 17

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AX498829/c
LOCUS AX498829 17 bp DNA linear PAT 27-SBP-2002
DEFINITION Sequence 136 from Patent EP1229046.
ACCESSION AX498829
VERSION AX498829.1 GI:23381111
KEYWORDS .
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE 1
AUTHORS Zhan,J.
TITLE Human testis expressed patched like protein
JOURNAL Patent: EP 1229046-A 136 07-AUG-2002;
Aeomica, Inc. (US)
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Best Local Similarity 88.2%; Pred. No. 2.6e+02;
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QY 1135 GCTAGGGCTTCTGCACC 1151
Db 17 GCTTGGGCTTCTGCTCC 1

RESULT 220
AX672128/c
LOCUS AX672128 17 bp DNA linear PAT 27-MAR-2003
DEFINITION Sequence 573 from Patent WO03004536.
ACCESSION AX672128
VERSION AX672128.1 GI:29330476
KEYWORDS .
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
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REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
AUTHORS 1  
TITLE Teleman, A., Anson, R. and Tuijthof, M.  
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and their use as medicines  
JOURNAL Patent: WO 0304526-A 573 16-JAN-2003;  
Molecular Engines Laboratories (FR)  
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Db 17 TTGTCATCTCTGATC 1  
RESULT 221  
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LOCUS AX722413 17 bp DNA linear PAT 08-MAY-2003  
DEFINITION Sequence 100 from Patent WO03025176.  
ACCESSION AX722413  
VERSION AX722413.1 GI:30422914  
KEYWORDS Mus musculus (house mouse)  
SOURCE  
ORGANISM Mus musculus  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Murinae; Mus.  
REFERENCE 1  
AUTHORS Teleman, A., Anson, R. and Tuijthof, M.  
TITLE Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines  
JOURNAL Patent: WO 03025176-A 100 27-MAR-2003;  
Molecular Engines Laboratories (FR)  
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LOCUS AX723045 17 bp DNA linear PAT 08-MAY-2003  
DEFINITION Sequence 732 from Patent WO03025176.  
ACCESSION AX723045  
VERSION AX723045.1 GI:30423546  
KEYWORDS Mus musculus (house mouse)  
SOURCE  
ORGANISM Mus musculus  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Murinae; Mus.  
REFERENCE 1  
AUTHORS Teleman, A., Anson, R. and Tuijthof, M.  
TITLE Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines

JOURNAL Patent: WO 03025176-A 732 27-MAR-2003;  
Molecular Engines Laboratories (FR)  
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Qy 28 CAGTTCCTTAGGCATC 44  
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RESULT 223  
AX734722  
LOCUS AX734722 17 bp DNA linear PAT 08-MAY-2003  
DEFINITION Sequence 312 from Patent WO03025177.  
ACCESSION AX734722  
VERSION AX734722.1 GI:30513999  
KEYWORDS Homo sapiens (human)  
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ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
REFERENCE 1  
AUTHORS Teleman, A., Anson, R. and Tuijthof, M.  
TITLE Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments  
JOURNAL Patent: WO 03025177-A 312 27-MAR-2003;  
Molecular Engines Laboratories (FR)  
FEATURES Location/Qualifiers  
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Db 1 GATCTTCTCATGCTTTC 17  
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DEFINITION Sequence 1741 from Patent WO03025177.  
ACCESSION AX736151  
VERSION AX736151.1 GI:30515428  
KEYWORDS Homo sapiens (human)  
SOURCE  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
REFERENCE 1  
AUTHORS Teleman, A., Anson, R. and Tuijthof, M.  
TITLE Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments  
JOURNAL Patent: WO 03025177-A 1741 27-MAR-2003;  
Molecular Engines Laboratories (FR)  
FEATURES Location/Qualifiers  
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QY 161 GATCTTCTCATGCTTTC 177
||||| ||||| ||||| |||||
Db 1 GATCTGCTAATGCTTTC 17

RESULT 225
AX756946      17 bp DNA linear PAT 25-JUN-2003
DEFINITION   Sequence 267 from Patent WO03040369.
ACCESSION    AX756946
VERSION      AX756946.1 GI:32251500
KEYWORDS     Homo sapiens (human)
SOURCE       Homo sapiens
ORGANISM     Homo sapiens
REFERENCE    1
AUTHORS      Telerman,A., Anson,R. and Tuijnder,M.
TITLE        Sequences involved in tumoral suppression, tumoral reversion,
              apoptosis and/or viral resistance phenomena and their use as
              medicines
JOURNAL      Patent: WO 03040369-A 267 15-MAY-2003;
              Molecular Engines Laboratories (FR)
FEATURES     Location/Qualifiers
              source
                1..17
                /organism="Homo sapiens"
                /mol_type="unassigned DNA"
                /db_xref="taxon:9606"

Query Match      0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.6e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 161 GATCTTCTCATGCTTTC 177
||||| ||||| ||||| |||||
Db 1 GATCTTCTCTGTTTTC 17

RESULT 226
AX761600/c    17 bp DNA linear PAT 25-JUN-2003
DEFINITION   Sequence 4921 from Patent WO03040369.
ACCESSION    AX761600
VERSION      AX761600.1 GI:32256216
KEYWORDS     Homo sapiens (human)
SOURCE       Homo sapiens
ORGANISM     Homo sapiens
REFERENCE    1
AUTHORS      Telerman,A., Anson,R. and Tuijnder,M.
TITLE        Sequences involved in tumoral suppression, tumoral reversion,
              apoptosis and/or viral resistance phenomena and their use as
              medicines
JOURNAL      Patent: WO 03040369-A 4921 15-MAY-2003;
              Molecular Engines Laboratories (FR)
FEATURES     Location/Qualifiers
              source
                1..17
                /organism="Homo sapiens"
                /mol_type="unassigned DNA"
                /db_xref="taxon:9606"

Query Match      0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.6e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1597 AGATGCTGGGTAAGATC 1613
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Db 17 AGATACTGGAAAGATC 1

RESULT 227
AX783828/c    17 bp DNA linear PAT 17-JUL-2003
DEFINITION   Sequence 2159 from Patent WO03050284.
ACCESSION    AX783828
VERSION      AX783828.1 GI:32951677
KEYWORDS     Homo sapiens (human)
SOURCE       Homo sapiens
ORGANISM     Homo sapiens
REFERENCE    1
AUTHORS      Guo,J.
TITLE        Human prostate cancer candidate protein 1
              Patent: WO 03050284-A 2159 19-JUN-2003;
              Amersham Biosciences (SV) Corp. (US)
FEATURES     Location/Qualifiers
              source
                1..17
                /organism="Homo sapiens"
                /mol_type="unassigned DNA"
                /db_xref="taxon:9606"

Query Match      0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.6e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 208 TCAAAAGGGAGTTAAAGG 224
||||| ||||| ||||| |||||
Db 17 TGAAGAGGGAGTCAAGG 1

RESULT 228
AX801968      17 bp DNA linear PAT 24-NOV-2003
DEFINITION   Sequence 107 from Patent WO03057913.
ACCESSION    AX801968
VERSION      AX801968.1 GI:38500892
KEYWORDS     Euthynnus alletteratus (little tunny)
SOURCE       Euthynnus alletteratus
ORGANISM     Euthynnus alletteratus
REFERENCE    1
AUTHORS      Mablat,C., Desvarenne,S., Babola,O., Lacroix,B. and bello Pigem,N.
TITLE        Method for the detection and/or identification of the original
              animal species in animal matter contained in a sample
              Patent: WO 03057913-A 107 17-JUL-2003;
              BIO MERIEUX (FR)
FEATURES     Location/Qualifiers
              source
                1..17
                /organism="Euthynnus alletteratus"
                /mol_type="unassigned DNA"
                /db_xref="taxon:8228"

Query Match      0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.6e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 449 GGGCTGTTGCTGCGCAAT 465
||||| ||||| ||||| |||||
Db 1 GGCCTGTTCTTCGCAAT 17

RESULT 229
AX802105      17 bp DNA linear PAT 24-NOV-2003
DEFINITION   Sequence 244 from Patent WO03057913.
ACCESSION    AX802105
```

**TITLE** Method and reagent for inhibiting P-glycoprotein (mdr-1-gene)  
**INVENTOR(S)** Thompson, C. D.  
**ATTORNEY**

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FEATURES
  source
    Location/Qualifiers
      1. .18
        /organism="unidentified"
        /mol_type="genomic DNA"
        /db_xref="taxon:32644"

Query Match
  Best Local Similarity 0.7%; Score 13.8; DB 1; Length 18;
  Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 702 CTGGTCACGTGTCTTAC 718
Db 18 CTGGTCACGTGTCTTTC 2

RESULT 234
LOCUS BD266259 18 bp DNA linear PAT 17-JUL-2003
DEFINITION Universal arrays.
ACCESSION BD266259
VERSION BD266259.1 GI:33076027
KEYWORDS JP 2002539849-A/259.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 18)
AUTHORS Fan,J.B., Hirschhorn,J.N., Huang,X., Kaplan,P., Lander,E.S.,
Lockhart,D.J., Ryder,T. and Sklar,P.
TITLE Universal arrays
JOURNAL Patent: JP 2002539849-A 259 26-NOV-2002;
COMMENT WHITEHEAD INSTITUTE FOR BIOMEDICAL RESEARCH,AFFYMETRIX INC
PN JP 2002539849-A/259
PD 26-NOV-2002
PF 27-MAR-2000 JP 2000608794
PR 26-MAR-1999 US 60/126473,23-JUN-1999 US 60/140359 PI
JIAN BING PAN,JOEL N HIRSCHHORN,XIAOHUA
HUANG,PAUL KAPLAN,ERIC
PI S LANDER.
PI DAVID J LOCKHART,THOMAS RYDER,PAMELA SKLAR
PC C12Q1/68,C12N15/00,C12N15/09,C12N15/09,C12N15/09,G01N33/53, PC
G01N33/566,
CC G01N37/00,C12N15/00,C12N15/00,C12N15/00
PC Primer
FH Key
FT source
FT Location/Qualifiers
  1. .18
    /organism='Artificial Sequence'

FEATURES
  source
    Location/Qualifiers
      1. .18
        /organism="synthetic construct"
        /mol_type="genomic DNA"
        /db_xref="taxon:32630"

Query Match
  Best Local Similarity 0.7%; Score 13.8; DB 1; Length 18;
  Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 761 CCGGTCTGTGCGCTGG 777
Db 1 CCGGTCTGTGCGCTGG 17

RESULT 235
LOCUS CQ808178 18 bp DNA linear PAT 10-MAY-2004
DEFINITION Sequence 1628 from Patent WO2004035803.
ACCESSION CQ808178
VERSION CQ808178.1 GI:47113572
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1

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AUTHORS Poekens,J., Harbeck,N., Koenig,T., Maier,S., Martens,J., Model,F.,
Nimmrich,I., Rujan,T., Schmitt,A., Schmitt,M., Look,M.P. and
Marx,A.
TITLE Method and nucleic acids for the improved treatment of breast cell
proliferative disorders
JOURNAL Patent: WO 2004035803-A 1628 29-APR-2004;
FEATURES Epigenomics AG (DE)
  source
    Location/Qualifiers
      1. .18
        /organism="synthetic construct"
        /mol_type="unassigned DNA"
        /db_xref="taxon:32630"
        /note="Detection oligonucleotide for CSNK2B"

Query Match
  Best Local Similarity 0.7%; Score 13.8; DB 1; Length 18;
  Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 414 GAATGTTTAAGTATGTT 430
Db 2 GAATGTTTATGTTGTT 18

RESULT 236
LOCUS CQ808452 18 bp DNA linear PAT 10-MAY-2004
DEFINITION Sequence 1902 from Patent WO2004035803.
ACCESSION CQ808452
VERSION CQ808452.1 GI:47113846
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Poekens,J., Harbeck,N., Koenig,T., Maier,S., Martens,J., Model,F.,
Nimmrich,I., Rujan,T., Schmitt,A., Schmitt,M., Look,M.P. and
Marx,A.
TITLE Method and nucleic acids for the improved treatment of breast cell
proliferative disorders
JOURNAL Patent: WO 2004035803-A 1902 29-APR-2004;
FEATURES Epigenomics AG (DE)
  source
    Location/Qualifiers
      1. .18
        /organism="synthetic construct"
        /mol_type="unassigned DNA"
        /db_xref="taxon:32630"
        /note="Detection oligonucleotide for IGF1"

Query Match
  Best Local Similarity 0.7%; Score 13.8; DB 1; Length 18;
  Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 162 ATCTTCTCATGCTTCT 178
Db 17 ATCTTATCATCCTTCT 1

RESULT 237
LOCUS E36846/c 18 bp DNA linear PAT 18-JUN-2001
DEFINITION Human telomerase catalytic subunit promoter.
ACCESSION E36846
VERSION E36846.1 GI:13022809
KEYWORDS JP 1999253177-A/54.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE 1 (bases 1 to 18)
AUTHORS Thomas,R.S., Jochimu,R., Toru,N., Karen,B.C., Greg,B.M.,
Calvin,B.H. and William,H.A.
TITLE Human telomerase catalytic subunit promoter
JOURNAL Patent: JP 1999253177-A 54 21-SEP-1999;
JERON CORP, UNIVERSITY TECHNOLOGY CORP

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COMMENT OS Unidentified
PN JP 199253177-A/54
PD 21-SEP-1999
PF 15-OCT-1998 JP 1998320169
PR 01-OCT-1996 US 08/724,643,18-APR-1997 US 08/844,419, PR
25-APR-1997 US 08/846,017,06-MAY-1997 US 08/851,843, PR
03-MAY-1997 US 08/854,050,14-AUG-1997 US 08/911,312, PR
14-AUG-1997 US 08/912,951,14-AUG-1997 US 08/915,503 PI THOMAS
R SECHI, JOCHIMU RINGNER, TORU NAKAMURA, KAREN B CHAPMAN, PI GREG B
MORIN,
PI CALVIN B HARET, WILLIAM H ANDREWS
PC C12N15/09, A61K31/70, A61K38/55, A61K39/395, A61K39/395, A61K48/00,
PC C12Q1/02, A61K31/70, A61K38/55, G01N33/48, G01N33/50, C07K14/47, PC
PC C12Q1/48, C12Q1/68, G01N33/15, G01N33/48, G01N33/50, C07K14/47, PC
PC C12N1/19, C12N1/21, C12N5/10, C12N9/12, C12P21/08, (C12N1/19, PC
C12R1:84),
PC (C12N1/21, C12R1:19), (C12N9/12, C12R1:19), (C12N9/12, C12R1:84),
PC (C12N9/12, C12R1:91), C12N15/00, A61K37/64, C12N5/00 CC
Strandedness: Single;
CC Topology: Linear;
FH Key Location/Qualifiers
FT source 1..18
FT FEATURES Location/Qualifiers
source 1..18
/organism="Unidentified".
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1346 CCGGCCACACCGTTGA 1362
Db 18 CCGGCCACACCGTTGA 2
RESULT 238
AR231296/C
LOCUS AR231296 18 bp DNA linear PAT 20-DEC-2002
DEFINITION Sequence 33 from patent US 6451968.
ACCESSION AR231296
VERSION AR231296.1 GI:27272227
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 18)
AUTHORS Egholm, M., Nielsen, P., Buchardt, O., Dueholm, K.L., Christensen, L.,
Coull, J.M., Kiely, J. and Griffith, M.
TITLE Peptide nucleic acids
JOURNAL Patent: US 6451968-A 33 17-SEP-2002;
FEATURES Location/Qualifiers
source 1..18
/organism="unknown"
/mol_type="genomic DNA"
Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1652 AAAGAAAAATAAGAAGA 1668
Db 17 AAAGAAAAATAAGAAGA 1
RESULT 239
AR237899
LOCUS AR237899 18 bp DNA linear PAT 20-DEC-2002
DEFINITION Sequence 6 from patent US 6468523.
ACCESSION AR237899
VERSION AR237899.1 GI:27282757
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 18)
AUTHORS Cohen, D., Chumakov, I. and Blumenfeld, M.
TITLE Biallelic markers for use in constructing a high density
disequilibrium map of the human genome
JOURNAL Patent: US 6537751-A 5919 25-MAR-2003;
FEATURES Location/Qualifiers
source 1..18
/organism="unknown"
/mol_type="genomic DNA"
COMMENT OS Unidentified
PN JP 199253177-A/54
PD 21-SEP-1999
PF 15-OCT-1998 JP 1998320169
PR 01-OCT-1996 US 08/724,643,18-APR-1997 US 08/844,419, PR
25-APR-1997 US 08/846,017,06-MAY-1997 US 08/851,843, PR
03-MAY-1997 US 08/854,050,14-AUG-1997 US 08/911,312, PR
14-AUG-1997 US 08/912,951,14-AUG-1997 US 08/915,503 PI THOMAS
R SECHI, JOCHIMU RINGNER, TORU NAKAMURA, KAREN B CHAPMAN, PI GREG B
MORIN,
PI CALVIN B HARET, WILLIAM H ANDREWS
PC C12N15/09, A61K31/70, A61K38/55, A61K39/395, A61K39/395, A61K48/00,
PC C12Q1/02, A61K31/70, A61K38/55, G01N33/48, G01N33/50, C07K14/47, PC
PC C12Q1/48, C12Q1/68, G01N33/15, G01N33/48, G01N33/50, C07K14/47, PC
PC C12N1/19, C12N1/21, C12N5/10, C12N9/12, C12P21/08, (C12N1/19, PC
C12R1:84),
PC (C12N1/21, C12R1:19), (C12N9/12, C12R1:19), (C12N9/12, C12R1:84),
PC (C12N9/12, C12R1:91), C12N15/00, A61K37/64, C12N5/00 CC
Strandedness: Single;
CC Topology: Linear;
FH Key Location/Qualifiers
FT source 1..18
FT FEATURES Location/Qualifiers
source 1..18
/organism="unknown"
/mol_type="genomic DNA"
Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1346 CCGGCCACACCGTTGA 1362
Db 18 CCGGCCACACCGTTGA 2
RESULT 238
AR231296/C
LOCUS AR231296 18 bp DNA linear PAT 20-DEC-2002
DEFINITION Sequence 33 from patent US 6451968.
ACCESSION AR231296
VERSION AR231296.1 GI:27272227
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 18)
AUTHORS Egholm, M., Nielsen, P., Buchardt, O., Dueholm, K.L., Christensen, L.,
Coull, J.M., Kiely, J. and Griffith, M.
TITLE Peptide nucleic acids
JOURNAL Patent: US 6451968-A 33 17-SEP-2002;
FEATURES Location/Qualifiers
source 1..18
/organism="unknown"
/mol_type="genomic DNA"
Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1652 AAAGAAAAATAAGAAGA 1668
Db 17 AAAGAAAAATAAGAAGA 1
RESULT 239
AR237899
LOCUS AR237899 18 bp DNA linear PAT 20-DEC-2002
DEFINITION Sequence 6 from patent US 6468523.
ACCESSION AR237899
VERSION AR237899.1 GI:27282757
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 18)
AUTHORS Cohen, D., Chumakov, I. and Blumenfeld, M.
TITLE Biallelic markers for use in constructing a high density
disequilibrium map of the human genome
JOURNAL Patent: US 6537751-A 5919 25-MAR-2003;
FEATURES Location/Qualifiers
source 1..18
/organism="unknown"
/mol_type="genomic DNA"
COMMENT OS Unidentified
PN JP 199253177-A/54
PD 21-SEP-1999
PF 15-OCT-1998 JP 1998320169
PR 01-OCT-1996 US 08/724,643,18-APR-1997 US 08/844,419, PR
25-APR-1997 US 08/846,017,06-MAY-1997 US 08/851,843, PR
03-MAY-1997 US 08/854,050,14-AUG-1997 US 08/911,312, PR
14-AUG-1997 US 08/912,951,14-AUG-1997 US 08/915,503 PI THOMAS
R SECHI, JOCHIMU RINGNER, TORU NAKAMURA, KAREN B CHAPMAN, PI GREG B
MORIN,
PI CALVIN B HARET, WILLIAM H ANDREWS
PC C12N15/09, A61K31/70, A61K38/55, A61K39/395, A61K39/395, A61K48/00,
PC C12Q1/02, A61K31/70, A61K38/55, G01N33/48, G01N33/50, C07K14/47, PC
PC C12Q1/48, C12Q1/68, G01N33/15, G01N33/48, G01N33/50, C07K14/47, PC
PC C12N1/19, C12N1/21, C12N5/10, C12N9/12, C12P21/08, (C12N1/19, PC
C12R1:84),
PC (C12N1/21, C12R1:19), (C12N9/12, C12R1:19), (C12N9/12, C12R1:84),
PC (C12N9/12, C12R1:91), C12N15/00, A61K37/64, C12N5/00 CC
Strandedness: Single;
CC Topology: Linear;
FH Key Location/Qualifiers
FT source 1..18
FT FEATURES Location/Qualifiers
source 1..18
/organism="unknown"
/mol_type="genomic DNA"
Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1719 CATCACTTTACCCCTAG 1735
Db 1 CATCACTTTACCCCTAG 17
RESULT 240
AR243367/C
LOCUS AR243367 18 bp DNA linear PAT 20-DEC-2002
DEFINITION Sequence 160 from patent US 6475789.
ACCESSION AR243367
VERSION AR243367.1 GI:27290578
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 18)
AUTHORS Cech, T.R., Lingner, J., Nakamura, T., Chapman, K.B., Morin, G.B.,
Harley, C.B. and Andrews, W.H.
TITLE Human telomerase catalytic subunit: diagnostic and therapeutic
methods
JOURNAL Patent: US 6475789-A 160 05-NOV-2002;
FEATURES Location/Qualifiers
source 1..18
/organism="unknown"
/mol_type="genomic DNA"
Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1346 CCGGCCACACCGTTGA 1362
Db 18 CCGGCCACACCGTTGA 2
RESULT 241
AR294184
LOCUS AR294184 18 bp DNA linear PAT 12-JUN-2003
DEFINITION Sequence 5919 from patent US 6537751.
ACCESSION AR294184
VERSION AR294184.1 GI:31681468
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 18)
AUTHORS Cohen, D., Chumakov, I. and Blumenfeld, M.
TITLE Biallelic markers for use in constructing a high density
disequilibrium map of the human genome
JOURNAL Patent: US 6537751-A 5919 25-MAR-2003;
FEATURES Location/Qualifiers
source 1..18
/organism="unknown"
/mol_type="genomic DNA"
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Query Match 0.7%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 2.8e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 177 CTCTTGCCCTTTCTAT 193  
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Db 1 CCTCTTGCCCTTTCTCT 17

RESULT 242  
LOCUS AR296488 18 bp DNA linear PAT 12-JUN-2003  
DEFINITION Sequence 8223 from patent US 6537751.  
ACCESSION AR296488  
VERSION AR296488.1 GI:31683772  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Cohen, D., Chumakov, I. and Blumenfeld, M.  
TITLE Biallelic markers for use in constructing a high density  
disequilibrium map of the human genome  
JOURNAL Patent: US 6537751-A 8223 25-MAR-2003;  
FEATURES Location/Qualifiers  
source 1..18  
/organism="unknown"  
/mol\_type="genomic DNA"

Query Match 0.7%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 2.8e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1500 AACAGGGAGTGGTAAC 1516  
| | | | | | | | | | | | | | | | | |  
Db 2 AACAGGGAGAGATAAAC 18

RESULT 243  
LOCUS AR302706 18 bp DNA linear PAT 12-JUN-2003  
DEFINITION Sequence 3 from patent US 6541448.  
ACCESSION AR302706  
VERSION AR302706.1 GI:31691086  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Isaac, B., Krieger, E.K., Mettus, A.-M.L., Moshiri, F. and  
Sivasubramanian, S.  
TITLE Polypeptide compositions toxic to anthonomus insects, and methods  
of use  
JOURNAL Patent: US 6541448-A 3 01-APR-2003;  
FEATURES Location/Qualifiers  
source 1..18  
/organism="unknown"  
/mol\_type="genomic DNA"

Query Match 0.7%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 2.8e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1719 CATCACTTTACCCCTAG 1735  
| | | | | | | | | | | | | | | | | |  
Db 1 CATCACTTTCCCATAG 17

RESULT 244  
LOCUS AR352925/c 18 bp DNA linear PAT 17-AUG-2003  
DEFINITION Sequence 42 from patent US 6590078.

ACCESSION AR352925  
VERSION AR352925.1 GI:33758337  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Ward, M. and Power, S.D.  
TITLE DNA sequences, vectors, and fusion polypeptides for secretion of  
polypeptides in filamentous fungi  
JOURNAL Patent: US 6590078-A 42 08-JUL-2003;  
FEATURES Location/Qualifiers  
source 1..18  
/organism="unknown"  
/mol\_type="genomic DNA"

Query Match 0.7%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 2.8e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1123 TCGCGCGCGACTGCTAG 1139  
| | | | | | | | | | | | | | | | | |  
Db 17 TCGTGGCGGAGRGCTAG 1

RESULT 245  
LOCUS AR390523/c 18 bp DNA linear PAT 18-DEC-2003  
DEFINITION Sequence 393 from patent US 6610839.  
ACCESSION AR390523  
VERSION AR390523.1 GI:40112448  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Morin, G.B. and Andrews, W.H.  
TITLE Promoter for telomerase reverse transcriptase  
JOURNAL Patent: US 6610839-A 393 26-AUG-2003;  
FEATURES Location/Qualifiers  
source 1..18  
/organism="unknown"  
/mol\_type="genomic DNA"

Query Match 0.7%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 2.8e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1346 CCTGCCACACCGTTGA 1362  
| | | | | | | | | | | | | | | | | |  
Db 18 CCTGCCACACCGGTGA 2

RESULT 246  
LOCUS AR393137/c 18 bp DNA linear PAT 18-DEC-2003  
DEFINITION Sequence 393 from patent US 6617110.  
ACCESSION AR393137  
VERSION AR393137.1 GI:40118422  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 18)  
AUTHORS Cech, T.R., Lingner, J., Nakamura, T., Chapman, K.B., Morin, G.B.,  
Harley, C.B. and Andrews, W.H.  
TITLE Cells immortalized with telomerase reverse transcriptase for use in  
drug screening  
JOURNAL Patent: US 6617110-A 393 09-SEP-2003;  
FEATURES Location/Qualifiers  
source 1..18  
/organism="unknown"  
/mol\_type="genomic DNA"

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Query Match      0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1346 CCTGCCCCACACGGTGA 1362
DB 18 CCTGCCCCACACGGTGA 2

RESULT 247
AX472766
LOCUS AX472766 18 bp DNA linear PAT 09-AUG-2002
DEFINITION Sequence 3 from Patent WO0187940.
ACCESSION AX472766
VERSION AX472766.1 GI:22207620
KEYWORDS
SOURCE
ORGANISM Mus musculus (house mouse)
REFERENCE 1
AUTHORS Isaac,B.C., Krieger,E.K., mettus Light,A.M., Sivasupramaniam,S. and Moshiri,P.
TITLE Polypeptide compositions toxic to anthonomus insects, and methods of use
JOURNAL Patent: WO 0187940-A 3 22-NOV-2001; Monsanto Technology LLC (US)
FEATURES
source
Location/Qualifiers
1..18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"

Query Match      0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1719 CATCACTTTACCCCTAG 1735
DB 1 CATCACTTTCCCATAG 17

RESULT 248
AX529085/c
LOCUS AX529085 18 bp DNA linear PAT 21-NOV-2002
DEFINITION Sequence 12 from Patent WO0246459.
ACCESSION AX529085
VERSION AX529085.1 GI:25173133
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE 1
AUTHORS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
TITLE Method for the determination of at least one functional polymorphism in the nucleotide sequence of a preselected candidate gene and its applications
JOURNAL Patent: WO 0246459-A 12 13-JUN-2002; GenOdysee (FR)
FEATURES
source
Location/Qualifiers
1..18
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match      0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 225 TCGTATTGGCAATGTG 241
DB 17 TCGTATTGGCAATGTG 1

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RESULT 249
AX698805/c
LOCUS AX698805 18 bp DNA linear PAT 02-APR-2003
DEFINITION Sequence 11 from Patent WO02086107.
ACCESSION AX698805
VERSION AX698805.1 GI:29499593
KEYWORDS
SOURCE Mus musculus (house mouse)
ORGANISM Mus musculus
REFERENCE 1
AUTHORS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
TITLE A method for differentiating stem cells into insulin-producing cells
JOURNAL Patent: WO 02086107-A 11 31-OCT-2002; Develogen Aktiengesellschaft fuer Entwicklungsbiologische Forschung (DE) ; INSTITUT FUER PFLANZENGENETIK UND KULTURPFLANZENFORSCHUNG (DE)
FEATURES
source
Location/Qualifiers
1..18
/organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"

Query Match      0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 861 CTGGACACTAAGGGCAG 877
DB 17 CTGGTCACTAAGGGCTG 1

RESULT 250
AX705550/c
LOCUS AX705550 18 bp DNA linear PAT 04-APR-2003
DEFINITION Sequence 219 from Patent WO03014388.
ACCESSION AX705550
VERSION AX705550.1 GI:29562215
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE 1
AUTHORS Distler,J., Model,P. and Taubert,H.
TITLE Method and nucleic acids for the analysis of colon cancer
JOURNAL Patent: WO 03014388-A 219 20-FEB-2003; Epigenomics AG (DE)
FEATURES
source
Location/Qualifiers
1..18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Detection oligonucleotide for p16"

Query Match      0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1613 CATCGCTCACCAAAACC 1629
DB 17 CAACCTCTACCAAAACC 1

RESULT 251
AX705552
LOCUS AX705552 18 bp DNA linear PAT 04-APR-2003
DEFINITION Sequence 221 from Patent WO03014388.
ACCESSION AX705552
VERSION AX705552.1 GI:29562217

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KEYWORDS
SOURCE      synthetic construct
ORGANISM    synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
AUTHORS     Disler,J., Model,F. and Taubert,H.
TITLE       Method and nucleic acids for the analysis of colon cancer
JOURNAL     Patent: WO 03014388-A 221 20-FEB-2003;
            Epigenomics AG (DE)
FEATURES
source
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/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Detection oligonucleotide for p16"

Query Match      0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1613 CATCGCTCACCACCAACC 1629
Db 2 CAACCTCCACCAACC 18

RESULT 252
AX810428/c
LOCUS      AX810428      18 bp      DNA      linear      PAT 25-NOV-2003
DEFINITION Sequence 393 from Patent EP1333094.
ACCESSION  AX810428
VERSION     AX810428.1 GI:38523920
KEYWORDS   unidentified
SOURCE     unidentified
ORGANISM   unclassified.
REFERENCE   1
AUTHORS     Cech,T.R., Lingner,J., Nakamura,T., Chapman,K.B., Morin,G.B.,
            Harley,C.B. and Andrews,W.H.
TITLE       Human telomerase catalytic subunit
JOURNAL     Patent: EP 1333094-A 393 06-AUG-2003;
            Geron Corporation (US) ; University Technology Corporation (US)
FEATURES
source
1..18
/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32844"

Query Match      0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1346 CCTGCCACACCGTTGA 1362
Db 18 CCTGCCACACCGTTGA 2

RESULT 253
BD011097/c
LOCUS      BD011097      18 bp      DNA      linear      PAT 31-JAN-2002
DEFINITION Human telomerase catalytic subunit.
ACCESSION  BD011097
VERSION     BD011097.1 GI:186399470
KEYWORDS   JP 2001081042-A/54.
SOURCE     unidentified
ORGANISM   unclassified.
REFERENCE   1 (bases 1 to 18)
AUTHORS     Sechi,T.R., Lingner,J., Nakamura,T., Chapman,K.B., Mori,G.B.,
            Harley,C.B. and Andrews,W.H.
TITLE       Human telomerase catalytic subunit
JOURNAL     Patent: JP 2001081042-A 54 27-MAR-2001;
            GERON CORP.,UNIVERSITY TECHNOLOGY CORP
COMMENT     OS Unidentified

KEYWORDS
SOURCE      synthetic construct
ORGANISM    synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
AUTHORS     Disler,J., Model,F. and Taubert,H.
TITLE       Method and nucleic acids for the analysis of colon cancer
JOURNAL     Patent: WO 03014388-A 221 20-FEB-2003;
            Epigenomics AG (DE)
FEATURES
source
1..18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Detection oligonucleotide for p16"

Query Match      0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1346 CCTGCCACACCGTTGA 1362
Db 18 CCTGCCACACCGTTGA 2

RESULT 254
AX316131
LOCUS      AX316131      44 bp      DNA      linear      PAT 14-DEC-2001
DEFINITION Sequence 22 from Patent WO0190363.
ACCESSION  AX316131
VERSION     AX316131.1 GI:17899322
KEYWORDS   synthetic construct
SOURCE     synthetic construct
ORGANISM   other sequences; artificial sequences.
REFERENCE   1
AUTHORS     Verheije,M.H. and Meulenbergh,J.J.
TITLE       Chimeric arterivirus-like particles
JOURNAL     Patent: WO 0190363-A 22 29-NOV-2001;
            ID-Lelystad, Instituut voor Dierghoudrij en Diergezondheid B.V.
            (NL)
FEATURES
source
1..44
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="primer PRRSV57"

Query Match      0.7%; Score 13.6; DB 1; Length 44;
Best Local Similarity 61.1%; Pred. No. 3.9e+02;
Matches 22; Conservative 0; Mismatches 14; Indels 0; Gaps 0;

QY 1022 TCCTTAGATGACTTCGTGTCATGATACGACGGTCCA 1057
Db 1 TGCTATCATGACAGAGATCATCTAGGACGACCCCA 36

RESULT 255
AR080236/c
LOCUS      AR080236      15 bp      DNA      linear      PAT 31-AUG-2000
DEFINITION Sequence 42 from patent US 5968737.
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ACCESSION AR080236
VERSION AR080236.1 GI:10006971
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 15)
AUTHORS Ali-Osman, F., Lopez-Berestein, G., Buolamwini, J.K., Antoun, G.,
Lo, H.-W., Keller, C. and Akande, O.
TITLE Method of identifying inhibitors of glutathione S-transferase (GST)
JOURNAL gene expression
FEATURES Patent: US 5968737-A 42 19-OCT-1999;
source Location/Qualifiers
1..15
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 0.7%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 2.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 360 CCATGAGGTGGCAA 374
Db 15 CTATGAGTGGCNA 1

RESULT 256
BD233331 15 bp DNA linear PAT 17-JUL-2003
LOCUS Method of detecting mutation selected by drug in HIV protease gene.
DEFINITION BD233331
ACCESSION BD233331.1 GI:33043101
VERSION JP 2002518065-A/427.
KEYWORDS Aids-associated retrovirus
SOURCE Aids-associated retrovirus
ORGANISM Viruses; Retroid viruses; Retroviridae.
REFERENCE 1 (bases 1 to 15)
AUTHORS Stuyver, L.
TITLE Method of detecting mutation selected by drug in HIV protease gene
JOURNAL Patent: JP 2002518065-A 427 25-JUN-2002;
INNOGENETICS NV
COMMENT OS Aids-associated retrovirus
PN JP 2002518065-A/427
PD 25-JUN-2002
PF 22-JUN-1999 JP 2000556068
PR 24-JUN-1998 EP 98870143.9
PI LIEVEN STUYVER
PC C12N15/09,C12Q1/68,C12Q1/70,C12N15/00
CC Method of detecting mutation selected by drug in HIV protease
FH gene
FT Key Location/Qualifiers
1..15
/organism="Aids-associated retrovirus".
FEATURES source Location/Qualifiers
1..15
/organism="Aids-associated retrovirus"
/mol_type="genomic DNA"
/db_xref="taxon:11966"

Query Match 0.7%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 2.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 640 TGTGTGACTCAGTTG 654
Db 1 TGTGTGACTCAGTTG 15

RESULT 257
I77359 15 bp DNA linear PAT 03-APR-1998
LOCUS Sequence 66 from patent US 5693532.
DEFINITION I77359
ACCESSION I77359
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VERSION 177359.1 GI:3013513
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 15)
AUTHORS McSwiggen, J., Draper, K., Pavco, P. and Woolf, T.
TITLE Respiratory syncytial virus ribozymes
JOURNAL Patent: US 5693532-A 66 02-DEC-1997;
FEATURES Location/Qualifiers
1..15
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 0.7%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 2.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1101 TGATATATGCCCTAA 1115
Db 1 TGATATATGCCCTAA 15

RESULT 258
AR285756 15 bp RNA linear PAT 10-APR-2003
LOCUS Sequence 128 from patent US 6528640.
DEFINITION AR285756
ACCESSION AR285756
VERSION AR285756.1 GI:29723350
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 15)
AUTHORS Beigelman, L., Burgin, A., Beaudry, A., Karpeisky, A.,
Matulic-Adamic, J., Sweedler, D. and Zinnen, S.
TITLE Synthetic ribonucleic acids with RNase activity
JOURNAL Patent: US 6528640-A 128 04-MAR-2003;
FEATURES Location/Qualifiers
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/organism="unknown"
/mol_type="unassigned RNA"

Query Match 0.7%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 2.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 608 CTGGGCAGTGGAGTG 622
Db 1 CTGGGCAGTGGAGTG 15

RESULT 259
AR397747 15 bp RNA linear PAT 18-DEC-2003
LOCUS Sequence 128 from patent US 6617438.
DEFINITION AR397747
ACCESSION AR397747
VERSION AR397747.1 GI:40134979
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 15)
AUTHORS Beigelman, L., Burgin, A.B., Beaudry, A., Karpeisky, A.,
Matulic-Adamic, J., Sweedler, D. and Zinnen, S.
TITLE Oligoribonucleotides with enzymatic activity
JOURNAL Patent: US 6617438-A 128 09-SEP-2003;
FEATURES Location/Qualifiers
1..15
/organism="unknown"
/mol_type="unassigned RNA"

Query Match 0.7%; Score 13.4; DB 1; Length 15;
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FEATURES
source
  Location/Qualifiers
    1..17
      /organism="Homo sapiens"
      /mol_type="genomic RNA"
      /db_xref="taxon:9606"

Query Match
  Best Local Similarity 93.3%; Score 13.4; DB 1; Length 17;
  Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1551 CAGAAGAGAAAG 1565
Db 16 CAGAAGAGAAATAG 2

RESULT 267
BD233332 17 bp DNA linear PAT 17-JUL-2003
LOCUS
DEFINITION Method of detecting mutation selected by drug in HIV protease gene.
ACCESSION BD233332
VERSION BD233332.1 GI:33043102
KEYWORDS JP 2002518065-A/428.
ORGANISM Aids-associated retrovirus
SOURCE Viruses; Retroid viruses; Retroviridae.
REFERENCE 1 (bases 1 to 17)
AUTHORS Stuyver,L.
TITLE Method of detecting mutation selected by drug in HIV protease gene
JOURNAL Patent: JP 2002518065-A 428 25-JUN-2002;
INNOGENETICS NV
COMMENT OS Aids-associated retrovirus
PN JP 2002518065-A/428
PD 25-JUN-2002 JP 2000556068
PF 22-JUN-1999 JP 2000556068
PR 24-JUN-1998 EP 98870143.9
PI LIEVEN STUYVER
PC C12N15/09,C12Q1/68,C12Q1/70,C12N15/00
CC Method of detecting mutation selected by drug in HIV protease
FH gene
FT Key Location/Qualifiers
FT source 1..17
FT /organism="Aids-associated retrovirus".

FEATURES
source
  Location/Qualifiers
    1..17
      /organism="Aids-associated retrovirus"
      /mol_type="genomic DNA"
      /db_xref="taxon:11966"

Query Match
  Best Local Similarity 93.3%; Score 13.4; DB 1; Length 17;
  Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 640 TGTGACTCACATTG 654
Db 1 TGTGACTCAGATTG 15

RESULT 268
BD254884 17 bp DNA linear PAT 17-JUL-2003
LOCUS
DEFINITION Regulation of repressor genes using nucleic acid molecules.
ACCESSION BD254884
VERSION BD254884.1 GI:33064654
KEYWORDS JP 2002541795-A/2677.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE 1 (bases 1 to 17)
AUTHORS Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J
TITLE Regulation of repressor genes using nucleic acid molecules
JOURNAL Patent: JP 2002541795-A 2677 10-DEC-2002;
RIBOZYME PHARMACEUTICALS INC
COMMENT OS Eukaryote

PN JP 2002541795-A/2677
PD 10-DEC-2002
PF 11-APR-2000 JP 2000611654
PR 12-APR-1999 US 60/129390
PI LAWRENCE BLATT,MICHAEL ZWICK,PAMELA PAVCO,JAMES MCSWIGGEN PC
C12N15/09,A61K38/00,A61K48/00,A61P43/00,A61P43/00,C12N5/10, PC
C12P21/02,
PC C12P21/02,C12P21/02//A61K31/711,(C12N5/10,C12R1:91),(C12P21/02, PC
C12R1:91),
PC (C12P21/02,C12R1:91),(C12P21/02,C12R1:91),C12N15/00,C12N5/00,
PC A61K37/02,
PC (C12N5/00,C12R1:91)
CC Regulation of repressor genes using nucleic acid molecules FH
Key Location/Qualifiers
FT source 1..17
FT /organism="Eukaryote".

FEATURES
source
  Location/Qualifiers
    1..17
      /organism="unidentified"
      /mol_type="genomic DNA"
      /db_xref="taxon:32644"

Query Match
  Best Local Similarity 93.3%; Score 13.4; DB 1; Length 17;
  Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 7 CTTTGCTGCTCTCCA 21
Db 15 CTTTGCTATCCTCCA 1

RESULT 269
CQ625359 17 bp DNA linear PAT 02-FEB-2004
LOCUS
DEFINITION Sequence 10099 from Patent WO0192524.
ACCESSION CQ625359
VERSION CQ625359.1 GI:41675577
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
REFERENCE 1
AUTHORS Gu,Y., Ji,Y., Penn,S.G., Hanzel,D.K., Rank,D.R., Chen,W. and
Shannon,M.E.
TITLE Myosin-like gene expressed in human heart and muscle
JOURNAL Patent: WO 0192524-A 10099 06-DEC-2001;
Aeomica, Inc. (US)
FEATURES
source
  Location/Qualifiers
    1..17
      /organism="Homo sapiens"
      /mol_type="unassigned DNA"
      /db_xref="taxon:9606"

Query Match
  Best Local Similarity 93.3%; Score 13.4; DB 1; Length 17;
  Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 360 CCATGAGTGGGCAA 374
Db 17 CCATCAGTGGGCAA 3

RESULT 270
CQ625360 17 bp DNA linear PAT 02-FEB-2004
LOCUS
DEFINITION Sequence 10100 from Patent WO0192524.
ACCESSION CQ625360
VERSION CQ625360.1 GI:41675578
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
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		/mol_type="unassigned RNA"		
Query Match 0.7%; Score 13.4; DB 1; Length 17;				
Best Local Similarity 93.3%; Pred. No. 2.9e+02;				
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;				
Qy	1707	GATGATGTCAGACAT	1721	
Dd	1	GATGATGTCAGATAT	15	
RESULT 273				
AR323227				
LOCUS	AR323227	17 bp	RNA	linear PAT 17-AUG-2003
DEFINITION	Sequence 629 from patent US 6566127.			
ACCESSION	AR323227			
VERSION	AR323227.1	GI:33709035		
KEYWORDS				
SOURCE	Unknown.			
ORGANISM	Unknown.			
REFERENCE	1 (bases 1 to 17)			
AUTHORS	Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.			
TITLE	Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor			
JOURNAL	Patent: US 6566127-A 629 20-MAY-2003;			
FEATURES	Location/Qualifiers			
source	1..17			
/organism="unknown"				
/mol_type="unassigned RNA"				
Query Match 0.7%; Score 13.4; DB 1; Length 17;				
Best Local Similarity 93.3%; Pred. No. 2.9e+02;				
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;				
Qy	1707	GATGATGTCAGACAT	1721	
Dd	1	GATGATGTCAGATAT	15	
RESULT 274				
AR326794				
LOCUS	AR326794	17 bp	RNA	linear PAT 17-AUG-2003
DEFINITION	Sequence 4196 from patent US 6566127.			
ACCESSION	AR326794			
VERSION	AR326794.1	GI:33712602		
KEYWORDS				
SOURCE	Unknown.			
ORGANISM	Unknown.			
REFERENCE	1 (bases 1 to 17)			
AUTHORS	Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.			
TITLE	Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor			
JOURNAL	Patent: US 6566127-A 4196 20-MAY-2003;			
FEATURES	Location/Qualifiers			
source	1..17			
/organism="unknown"				
/mol_type="unassigned RNA"				
Query Match 0.7%; Score 13.4; DB 1; Length 17;				
Best Local Similarity 93.3%; Pred. No. 2.9e+02;				
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;				
Qy	1224	TCGCGCTCATTATGG	1238	
Dd	1	TCGCGCTCACCATTGG	15	
RESULT 275				
AR402135				
LOCUS	AR402135	17 bp	DNA	linear PAT 18-DEC-2003
DEFINITION	Sequence 475 from patent US 6623962.			





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Db          ||||| ||||| |||||
2 CATTTCCTTGTT 16

RESULT 285
LOCUS      AX215129          17 bp    RNA          linear    PAT 07-SEP-2001
DEFINITION Sequence 571 from Patent WO0159103.
ACCESSION  AX215129
VERSION     AX215129.1  GI:15525172
KEYWORDS    .
SOURCE      synthetic construct
ORGANISM    other sequences; artificial sequences.
REFERENCE   1
AUTHORS     Blatt, L., McSwiggen, J. and Chowrira, B.M.
TITLE       Method and reagent for the modulation and diagnosis of cd20 and
JOURNAL     nogo gene expression
            Patent: WO 0159103-A 571 16-AUG-2001;
            RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
            McSwiggen, James (US) ; Chowrira, Bharat M. (US)
FEATURES    Location/Qualifiers
            source
            1..17
            /organism="synthetic construct"
            /mol_type="unassigned RNA"
            /db_xref="taxon:32630"
            /note="Nucleic Acid"

Query Match      0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.9e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      842 CAGATATACCACTT 856
Db      15 CAGATATAGCACTT 1

RESULT 286
LOCUS      AX215657          17 bp    RNA          linear    PAT 07-SEP-2001
DEFINITION Sequence 1099 from Patent WO0159103.
ACCESSION  AX215657
VERSION     AX215657.1  GI:15525700
KEYWORDS    .
SOURCE      synthetic construct
ORGANISM    other sequences; artificial sequences.
REFERENCE   1
AUTHORS     Blatt, L., McSwiggen, J. and Chowrira, B.M.
TITLE       Method and reagent for the modulation and diagnosis of cd20 and
JOURNAL     nogo gene expression
            Patent: WO 0159103-A 1099 16-AUG-2001;
            RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
            McSwiggen, James (US) ; Chowrira, Bharat M. (US)
FEATURES    Location/Qualifiers
            source
            1..17
            /organism="synthetic construct"
            /mol_type="unassigned RNA"
            /db_xref="taxon:32630"
            /note="Nucleic Acid"

Query Match      0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.9e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      629 CATTTCCTTGTT 643
Db      1 CATTTCCTTGTT 15

RESULT 287
LOCUS      AX215986          17 bp    RNA          linear    PAT 07-SEP-2001
DEFINITION Sequence 1428 from Patent WO0159103.
ACCESSION  AX215986
VERSION     AX215986.1  GI:15526029
KEYWORDS    .
SOURCE      synthetic construct
ORGANISM    other sequences; artificial sequences.
REFERENCE   1
AUTHORS     Blatt, L., McSwiggen, J. and Chowrira, B.M.
TITLE       Method and reagent for the modulation and diagnosis of cd20 and
JOURNAL     nogo gene expression
            Patent: WO 0159103-A 1428 16-AUG-2001;
            RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
            McSwiggen, James (US) ; Chowrira, Bharat M. (US)
FEATURES    Location/Qualifiers
            source
            1..17
            /organism="synthetic construct"
            /mol_type="unassigned RNA"
            /db_xref="taxon:32630"
            /note="Nucleic Acid"

Query Match      0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.9e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      842 CAGATATACCACTT 856
Db      16 CAGATATAGCACTT 2

RESULT 289
LOCUS      AX216109          17 bp    RNA          linear    PAT 07-SEP-2001
DEFINITION Sequence 1551 from Patent WO0159103.
ACCESSION  AX216109
VERSION     AX216109.1  GI:15526152
KEYWORDS    .
SOURCE      synthetic construct
ORGANISM    other sequences; artificial sequences.
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REFERENCE 1  
AUTHORS Blatt, L., Mcswiggen, J. and Chowrira, B.M.  
TITLE Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression  
JOURNAL Patent: WO 0159103-A 1551 16-AUG-2001;  
RIBOZYME PHARMACEUTICALS, INC. (US); Blatt, Lawrence (US);  
Mcswiggen, James (US); Chowrira, Bharat M. (US)  
FEATURES Location/Qualifiers  
source 1..17  
/organism="synthetic construct"  
/mol\_type="unassigned RNA"  
/db\_xref="taxon:32630"  
/note="Nucleic Acid"

Query Match 0.7%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.9e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 440 CTTGACCGCGGCTG 454  
Db 17 CTTGAACGCGGCTG 3

RESULT 290  
AX227392  
LOCUS AX227392 17 bp RNA linear PAT 10-SEP-2001  
DEFINITION Sequence 764 from Patent WO0157206.  
ACCESSION AX227392  
VERSION AX227392.1 GI:15556533  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.

REFERENCE 1  
AUTHORS Fattaey, A.R., Jarvis, T., Mcswiggen, J., Boohar, R.N. and Holman, P.S.  
TITLE Method and reagent for the inhibition of checkpoint kinase-1 (chk 1) enzyme  
JOURNAL Patent: WO 0157206-A 764 09-AUG-2001;  
RIBOZYME PHARMACEUTICALS, INC. (US); Fattaey, Ali R. (US)  
FEATURES Location/Qualifiers  
source 1..17  
/organism="synthetic construct"  
/mol\_type="unassigned RNA"  
/db\_xref="taxon:32630"

Query Match 0.7%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.9e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1959 CTGATTGACATTGTG 1973  
Db 3 CTGATTGATATTGTG 17

RESULT 291  
AX227625  
LOCUS AX227625 17 bp RNA linear PAT 10-SEP-2001  
DEFINITION Sequence 997 from Patent WO0157206.  
ACCESSION AX227625  
VERSION AX227625.1 GI:15556766  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.

REFERENCE 1  
AUTHORS Fattaey, A.R., Jarvis, T., Mcswiggen, J., Boohar, R.N. and Holman, P.S.  
TITLE Method and reagent for the inhibition of checkpoint kinase-1 (chk 1) enzyme  
JOURNAL Patent: WO 0157206-A 997 09-AUG-2001;  
RIBOZYME PHARMACEUTICALS, INC. (US); Fattaey, Ali R. (US)  
FEATURES Location/Qualifiers  
source 1..17  
/organism="synthetic construct"

/mol\_type="unassigned RNA"  
/db\_xref="taxon:32630"

Query Match 0.7%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.9e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1959 CTGATTGACATTGTG 1973  
Db 2 CTGATTGATATTGTG 16

RESULT 292  
AX422870  
LOCUS AX422870 17 bp RNA linear PAT 18-JUN-2002  
DEFINITION Sequence 1206 from Patent WO0188124.  
ACCESSION AX422870  
VERSION AX422870.1 GI:21526252  
KEYWORDS Homo sapiens (human)  
SOURCE Homo sapiens  
ORGANISM Homo sapiens  
REFERENCE 1  
AUTHORS Jarvis, T., von Carlowitz, I., Mcswiggen, J.A., McLaughlin, F.G. and Randi, A.M.  
TITLE Method and reagent for the inhibition of erg  
JOURNAL Patent: WO 0188124-A 1206 22-NOV-2001;  
RIBOZYME PHARMACEUTICALS, INC. (US); GLAXO GROUP LIMITED (GB)  
FEATURES Location/Qualifiers  
source 1..17  
/organism="Homo sapiens"  
/mol\_type="unassigned RNA"  
/db\_xref="taxon:9606"

Query Match 0.7%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.9e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 323 GACCATGTGCGGCTG 337  
Db 3 GACCATGTGCGGCAG 17

RESULT 293  
AX422871  
LOCUS AX422871 17 bp RNA linear PAT 18-JUN-2002  
DEFINITION Sequence 1207 from Patent WO0188124.  
ACCESSION AX422871  
VERSION AX422871.1 GI:21526253  
KEYWORDS Homo sapiens (human)  
SOURCE Homo sapiens  
ORGANISM Homo sapiens  
REFERENCE 1  
AUTHORS Jarvis, T., von Carlowitz, I., Mcswiggen, J.A., McLaughlin, F.G. and Randi, A.M.  
TITLE Method and reagent for the inhibition of erg  
JOURNAL Patent: WO 0188124-A 1207 22-NOV-2001;  
RIBOZYME PHARMACEUTICALS, INC. (US); GLAXO GROUP LIMITED (GB)  
FEATURES Location/Qualifiers  
source 1..17  
/organism="Homo sapiens"  
/mol\_type="unassigned RNA"  
/db\_xref="taxon:9606"

Query Match 0.7%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.9e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 323 GACCATGTGCGGCTG 337  
Db 3 GACCATGTGCGGCAG 17

Db 1 GACCATGTGGGCAG 15

RESULT 294  
AX530808  
LOCUS AX530808 17 bp DNA linear PAT 22-NOV-2002  
DEFINITION Sequence 317 from Patent EP1239051.  
ACCESSION AX530808  
VERSION AX530808.1 GI:25253411  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1  
AUTHORS Shannon,M.  
TITLE Human posh-like protein 1  
JOURNAL Patent: EP 1239051-A 317 11-SEP-2002;  
Aeomica, Inc. (US)  
FEATURES  
source  
1..17  
/organism="Homo sapiens"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:9606"

Query Match 0.7%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.9e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 118 TGTACAGCCAAATGT 132  
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Db 3 TGTACAGCCAAAGT 17

RESULT 295  
AX530809  
LOCUS AX530809 17 bp DNA linear PAT 22-NOV-2002  
DEFINITION Sequence 318 from Patent EP1239051.  
ACCESSION AX530809  
VERSION AX530809.1 GI:25253413  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1  
AUTHORS Shannon,M.  
TITLE Human posh-like protein 1  
JOURNAL Patent: EP 1239051-A 318 11-SEP-2002;  
Aeomica, Inc. (US)  
FEATURES  
source  
1..17  
/organism="Homo sapiens"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:9606"

Query Match 0.7%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.9e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 118 TGTACAGCCAAATGT 132  
|||||  
Db 2 TGTACAGCCAAAGT 16

RESULT 296  
AX530810  
LOCUS AX530810 17 bp DNA linear PAT 22-NOV-2002  
DEFINITION Sequence 319 from Patent EP1239051.  
ACCESSION AX530810  
VERSION AX530810.1 GI:25253415  
KEYWORDS  
SOURCE Homo sapiens (human)

ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1  
AUTHORS Shannon,M.  
TITLE Human posh-like protein 1  
JOURNAL Patent: EP 1239051-A 319 11-SEP-2002;  
Aeomica, Inc. (US)  
FEATURES  
source  
1..17  
/organism="Homo sapiens"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:9606"

Query Match 0.7%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.9e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 118 TGTACAGCCAAATGT 132  
|||||  
Db 1 TGTACAGCCAAAGT 15

RESULT 297  
AX673031/c  
LOCUS AX673031 17 bp DNA linear PAT 27-MAR-2003  
DEFINITION Sequence 1476 from Patent WO03004526.  
ACCESSION AX673031  
VERSION AX673031.1 GI:29331379  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1  
AUTHORS Telerman,A., Anson,R. and Tuijnder,M.  
TITLE Sequences involved in phenomena of tumour suppression, tumour  
reversion, apoptosis and/or resistance to viruses and their use as  
medicines  
JOURNAL Patent: WO 03004526-A 1476 16-JAN-2003;  
Molecular Engines Laboratories (FR)  
FEATURES  
source  
1..17  
/organism="Homo sapiens"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:9606"

Query Match 0.7%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.9e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 600 AAATTGACTGGGCA 614  
|||||  
Db 17 AAATTGACTGGGGA 3

RESULT 298  
AX723047/c  
LOCUS AX723047 17 bp DNA linear PAT 08-MAY-2003  
DEFINITION Sequence 734 from Patent WO03025176.  
ACCESSION AX723047  
VERSION AX723047.1 GI:30423548  
KEYWORDS  
SOURCE Mus musculus (house mouse)  
ORGANISM Mus musculus  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

REFERENCE 1  
AUTHORS Telerman,A., Anson,R. and Tuijnder,M.  
TITLE Sequences involved in phenomena of tumour suppression, tumour  
reversion, apoptosis and/or virus resistance and their use as  
medicines  
JOURNAL Patent: WO 03025176-A 734 27-MAR-2003;

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FEATURES
  source      Molecular Engines Laboratories (FR)
              1. .17
              /organism="Mus musculus"
              /mol_type="unassigned DNA"
              /db_xref="taxon:10090"

Query Match      0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.9e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1634 CAGAGCCAGGACC 1648
Db 15 CAGAGCCAGGGATC 1

RESULT 299
AX724045/C
LOCUS AX724045 17 bp DNA linear PAT 08-MAY-2003
DEFINITION Sequence 1732 from Patent WO03025176.
ACCESSION AX724045
VERSION AX724045.1 GI:30503388
KEYWORDS Mus musculus (house mouse)
SOURCE Mus musculus
ORGANISM Mus musculus
REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
AUTHORS Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
TITLE Telerman,A., Anson,R. and Tuijnder,M.
Sequences involved in phenomena of tumour suppression, tumour
reversion, apoptosis and/or virus resistance and their use as
medicines
JOURNAL Patent: WO 03025176-A 1732 27-MAR-2003;
Molecular Engines Laboratories (FR)
FEATURES Location/Qualifiers
  source      1. .17
              /organism="Mus musculus"
              /mol_type="unassigned DNA"
              /db_xref="taxon:10090"

Query Match      0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.9e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 150 TGCATTCCTCTGATC 164
Db 15 TGCATTCCTCTGATC 1

RESULT 300
AX724466
LOCUS AX724466 17 bp DNA linear PAT 08-MAY-2003
DEFINITION Sequence 2153 from Patent WO03025176.
ACCESSION AX724466
VERSION AX724466.1 GI:30503809
KEYWORDS Mus musculus (house mouse)
SOURCE Mus musculus
ORGANISM Mus musculus
REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
AUTHORS Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
TITLE Telerman,A., Anson,R. and Tuijnder,M.
Sequences involved in phenomena of tumour suppression, tumour
reversion, apoptosis and/or virus resistance and their use as
medicines
JOURNAL Patent: WO 03025176-A 2153 27-MAR-2003;
Molecular Engines Laboratories (FR)
FEATURES Location/Qualifiers
  source      1. .17
              /organism="Mus musculus"
              /mol_type="unassigned DNA"
              /db_xref="taxon:10090"

Query Match      0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.9e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 150 TGCATTCCTCTGATC 164
Db 15 TGCATTCCTCTGATC 1

RESULT 300
AX724466
LOCUS AX724466 17 bp DNA linear PAT 08-MAY-2003
DEFINITION Sequence 2153 from Patent WO03025176.
ACCESSION AX724466
VERSION AX724466.1 GI:30503809
KEYWORDS Mus musculus (house mouse)
SOURCE Mus musculus
ORGANISM Mus musculus
REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
AUTHORS Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
TITLE Telerman,A., Anson,R. and Tuijnder,M.
Sequences involved in phenomena of tumour suppression, tumour
reversion, apoptosis and/or virus resistance and their use as
medicines
JOURNAL Patent: WO 03025176-A 2153 27-MAR-2003;
Molecular Engines Laboratories (FR)
FEATURES Location/Qualifiers
  source      1. .17
              /organism="Mus musculus"
              /mol_type="unassigned DNA"
              /db_xref="taxon:10090"

Query Match      0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.9e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1704 GAAGATGATGTCAGA 1718
Db 17 GAAGATGATGTCAGA 3

RESULT 302
AX735711/C
LOCUS AX735711 17 bp DNA linear PAT 08-MAY-2003
DEFINITION Sequence 1301 from Patent WO03025177.
ACCESSION AX735711
VERSION AX735711.1 GI:30514988
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
AUTHORS Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
TITLE Telerman,A., Anson,R. and Tuijnder,M.
Sequences involved in phenomena of tumour suppression, tumour
reversion, apoptosis and/or resistance to viruses and the use
thereof as medicaments
JOURNAL Patent: WO 03025177-A 1301 27-MAR-2003;
Molecular Engines Laboratories (FR)
FEATURES Location/Qualifiers
  source      1. .17
              /organism="Homo sapiens"
              /mol_type="unassigned DNA"
              /db_xref="taxon:9606"

Query Match      0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.9e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 536 AAATTTACAGCTGAT 550
Db 16 AAATTTACAGCTGAT 2
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RESULT 303
AX735798/c
LOCUS       AX735798                17 bp    DNA        linear    PAT 08-MAY-2003
DEFINITION   Sequence 1388 from Patent WO03025177.
ACCESSION   AX735798
VERSION     AX735798.1  GI:30515075
KEYWORDS
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
REFERENCE   1
  AUTHORS   Telerman,A., Anson,R. and Tuijnder,M.
  TITLE     Sequences involved in phenomena of tumour suppression, tumour
            reversion, apoptosis and/or resistance to viruses and the use
            thereof as medicaments
  JOURNAL   Patent: WO 03025177-A 1388 27-MAR-2003;
            Molecular Engines Laboratories (FR)
FEATURES    source
            Location/Qualifiers
              1..17
                /organism="Homo sapiens"
                /mol_type="unassigned DNA"
                /db_xref="taxon:9606"
Query Match      0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.9e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 150 TGCATTCCTCTGATC 164
Db 15 TGCATTCCTCAGATC 1

RESULT 304
AX737424/c
LOCUS       AX737424                17 bp    DNA        linear    PAT 08-MAY-2003
DEFINITION   Sequence 3014 from Patent WO03025177.
ACCESSION   AX737424
VERSION     AX737424.1  GI:30516712
KEYWORDS
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
REFERENCE   1
  AUTHORS   Telerman,A., Anson,R. and Tuijnder,M.
  TITLE     Sequences involved in phenomena of tumour suppression, tumour
            reversion, apoptosis and/or resistance to viruses and the use
            thereof as medicaments
  JOURNAL   Patent: WO 03025177-A 3014 27-MAR-2003;
            Molecular Engines Laboratories (FR)
FEATURES    source
            Location/Qualifiers
              1..17
                /organism="Homo sapiens"
                /mol_type="unassigned DNA"
                /db_xref="taxon:9606"
Query Match      0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.9e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 150 TGCATTCCTCTGATC 164
Db 15 TGCATTCCTCAGATC 1

RESULT 305
AX783190/c
LOCUS       AX783190                17 bp    DNA        linear    PAT 17-JUL-2003
DEFINITION   Sequence 1521 from Patent WO03050284.
ACCESSION   AX783190
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VERSION     AX783190.1  GI:32951039
KEYWORDS
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
REFERENCE   1
  AUTHORS   Guo,J.
  TITLE     Human prostate cancer candidate protein 1
  JOURNAL   Patent: WO 03050284-A 1521 19-JUN-2003;
            Amersham Biosciences (SV) Corp. (US)
FEATURES    source
            Location/Qualifiers
              1..17
                /organism="Homo sapiens"
                /mol_type="unassigned DNA"
                /db_xref="taxon:9606"
Query Match      0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.9e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1031 GACTTCTGTCATGAT 1045
Db 15 GACTTCTTTTCATGAT 1

RESULT 306
BD067635
LOCUS       BD067635                17 bp    RNA        linear    PAT 27-AUG-2002
DEFINITION   Enzymatic nucleic acid treatment of diseases or conditions related
            to levels of epidermal growth factor receptors.
ACCESSION   BD067635
VERSION     BD067635.1  GI:22613238
KEYWORDS    JP 2001511003-A/475.
SOURCE      unidentified
ORGANISM    unclassified.
REFERENCE   1 (bases 1 to 17)
  AUTHORS   Akhtar,S., Fell,P. and Mcswiggen,J.A.
  TITLE     Enzymatic nucleic acid treatment of diseases or conditions related
            to levels of epidermal growth factor receptors
  JOURNAL   Patent: JP 2001511003-A 475 07-AUG-2001;
            RIBOZYME PHARMACEUTICALS INC,ASTON UNIV
COMMENT     OS Unidentified
            PN JP 2001511003-A/475
            PD 07-AUG-2001
            PF 14-JAN-1998 JP 1998532913
            PR 31-JAN-1997 US 60/036476,04-DEC-1997 US 08/985162 PI
            SAGHIR AKHTAR,PATRICIA FELL,JAMES A MCSWIGGEN PC
            C12N9/00,C07K14/71
            CC Strandedness: Single;
            CC Topology: Linear;
            CC Enzymatic nucleic acid treatment of diseases or conditions
            related to
            CC levels of epidermal growth factor receptors
            PH Key Location/Qualifiers
            FT source 1..17 /organism='Unidentified'.
            FT Location/Qualifiers
              1..17
                /organism="unidentified"
                /mol_type="genomic RNA"
                /db_xref="taxon:32644"
Query Match      0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.9e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1246 AGTTGCATTCCTTTG 1260
Db 1 AGTTGCATTCCTTTG 15
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RESULT 307
LOCUS      ARI146987
DEFINITION Sequence 47 from patent US 6221361.
ACCESSION  ARI146987
VERSION     ARI146987.1 GI:15110790
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 33)
AUTHORS   Cochran,M.D. and Junker,D.E.
TITLE     Recombinant swinepox virus
JOURNAL   Patent: US 6221361-A 47 24-APR-2001;
FEATURES   Location/Qualifiers
            1..33
            /organism="unknown"
            /mol_type="unassigned DNA"

Query Match      0.7%; Score 13.4; DB 1; Length 33;
Best Local Similarity 73.9%; Pred. No. 4.4e+02;
Matches 17; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 1345 CCTGCCCCACACGTTCAAGTG 1367
    ||| ||||| ||| ||| |||
DB 8 CCCAGCCCATCATGCTGAGGGTG 30

RESULT 308
LOCUS      ARI173659/c
DEFINITION Sequence 68 from patent US 6306588.
ACCESSION  ARI173659
VERSION     ARI173659.1 GI:17913979
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 16)
AUTHORS   Solus,J., Yang,S. and Chatterjee,D.K.
TITLE     Polymerases for analyzing or typing polymorphic nucleic acid
JOURNAL   Patent: US 6306588-A 68 23-OCT-2001;
FEATURES   Location/Qualifiers
            1..16
            /organism="unknown"
            /mol_type="unassigned DNA"

Query Match      0.6%; Score 13; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 367 GTGGGCAACTGTT 379
    ||| ||||| |||
DB 13 GTGGGCAACTGTT 1

RESULT 309
LOCUS      AX128606/c
DEFINITION Sequence 6 from Patent WO0130989.
ACCESSION  AX128606
VERSION     AX128606.1 GI:14135068
KEYWORDS   .
SOURCE     synthetic construct
ORGANISM   other sequences; artificial sequences.
REFERENCE  1
AUTHORS   Renner,W.A. and Nieba,L.
TITLE     Method for creating divergent populations of nucleic acid molecules
          and proteins
JOURNAL   Patent: WO 0130989-A 6 03-MAY-2001;
          Cytos Biotechnology AG (CH) ; Renner, Wolfgang Andreas (CH) ;

RESULT 310
LOCUS      AX255819
DEFINITION Sequence 240 from Patent WO0170982.
ACCESSION  AX255819
VERSION     AX255819.1 GI:16074863
KEYWORDS   .
SOURCE     synthetic construct
ORGANISM   other sequences; artificial sequences.
REFERENCE  1
AUTHORS   Beger,C., Barber,J. and Wong-Staal,F.
TITLE     Brca-1 regulators and methods of use
JOURNAL   Patent: WO 0170982-A 240 27-SEP-2001;
          Immusol Incorporated (US) ; Beger, Carmela (DE)
FEATURES   Location/Qualifiers
            1..16
            /organism="synthetic construct"
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Query Match      0.6%; Score 13; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1802 GTCAGATTCAGGG 1814
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DB 4 GTCAGATTCAGGG 16

RESULT 311
LOCUS      BD057093/c
DEFINITION Polymerases for analyzing or typing polymorphic nucleic acid
          fragments and uses thereof.
ACCESSION  BD057093
VERSION     BD057093.1 GI:22602699
KEYWORDS   JP 2001511018-A/44.
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE  1 (bases 1 to 16)
AUTHORS   Chatterjee,D.K., Solus,J. and Yang,S.
TITLE     Polymerases for analyzing or typing polymorphic nucleic acid
          fragments and uses thereof
JOURNAL   Patent: JP 2001511018-A 44 07-AUG-2001;
          LIFE TECHNOLOGIES INC
          PN JP 2001511018-A/44
          PD 07-AUG-2001
          PF 09-FEB-1998 JP 1998535069
          PR 07-FEB-1997 US 60/037393
          PI DEB K CHATTERJEE,JOSEPH SOLUS,SHUWEI YANG
          PC C12Q1/68,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12N5/12,C12N15/
          PC 09,C12N15/00,

RESULT 312
LOCUS      BD057093
DEFINITION Polymerases for analyzing or typing polymorphic nucleic acid
          fragments and uses thereof.
ACCESSION  BD057093
VERSION     BD057093.1 GI:22602699
KEYWORDS   JP 2001511018-A/44.
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE  1 (bases 1 to 16)
AUTHORS   Chatterjee,D.K., Solus,J. and Yang,S.
TITLE     Polymerases for analyzing or typing polymorphic nucleic acid
          fragments and uses thereof
JOURNAL   Patent: JP 2001511018-A 44 07-AUG-2001;
          LIFE TECHNOLOGIES INC
          PN JP 2001511018-A/44
          PD 07-AUG-2001
          PF 09-FEB-1998 JP 1998535069
          PR 07-FEB-1997 US 60/037393
          PI DEB K CHATTERJEE,JOSEPH SOLUS,SHUWEI YANG
          PC C12Q1/68,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12N5/12,C12N15/
          PC 09,C12N15/00,

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PC	C12N5/00
CC	Strandedness: Both;
CC	Topology: Both;
FH	Key Location/Qualifiers.
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Best Local Similarity	100.0%; Pred.No. 2.9e+02;
Matches	13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	367 GTGGGCAACTGTT 379 
Db	13 GTGGGCAACTGTT 1
RESULT 312	
BD258415	17 bp DNA linear PAT 17-JUL-2003
LOCUS	
DEFINITION	Regulation of repressor genes using nucleic acid molecules.
ACCESSION	BD258415
VERSION	BD258415.1 GI:33068185
KEYWORDS	JP 2002541795-A/6208.
SOURCE	unidentified
ORGANISM	unclassified.
REFERENCE	1 (bases 1 to 17)
AUTHORS	Blatt,L., Zwick,M., Pavco,P. and McSwiggen,J.
TITLE	Regulation of repressor genes using nucleic acid molecules
JOURNAL	Patent: JP 2002541795-A 6208 10-DEC-2002;
COMMENT	RIBOZYME PHARMACEUTICALS INC
OS	Eukaryote
PN	JP 2002541795-A/6208
PD	10-DEC-2002
PF	11-APR-2000 JP 2000611654
PR	12-APR-1999 US 60/129390
PI	LAWRENCE BLATT,MICHAEL,ZWICK,PAMELA PAVCO,JAMES MCSWIGGEN PC
C12N15/09,A61K38/00,A61K48/00,A61P43/00,A61P43/00,C12N5/10, PC	
C12P21/02,	
PC	C12P21/02,C12P21/02//A61K31/711,(C12N5/10,C12R1:91),(C12P21/02, PC
C12R1:91),	
PC	(C12P21/02,C12R1:91),(C12P21/02,C12R1:91),C12N15/00,C12N5/00,
PC	A61K37/02,
PC	C12N5/00,C12R1:91)
CC	Regulation of repressor genes using nucleic acid molecules FH
Key	Location/Qualifiers
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Best Local Similarity	100.0%; Pred.No. 3.1e+02;
Matches	13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	1141 GCTTCTGCACCTT 1153 
Db	5 GCTTCTGCACCTT 17
RESULT 313	
AR186104/c	17 bp DNA linear PAT 20-APR-2002
LOCUS	
DEFINITION	Sequence 1592 from patent US 6346398.
ACCESSION	AR186104
VERSION	AR186104.1 GI:20232069
KEYWORDS	JP 2002541795-A/6208.
SOURCE	unclassified.
REFERENCE	1 (bases 1 to 17)
AUTHORS	Pavco,P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.
TITLE	Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor
JOURNAL	Patent: US 6346398-A 4188 12-FEB-2002;
FEATURES	
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Query Match	0.6%; Score 13; DB 1; Length 17;
Best Local Similarity	100.0%; Pred.No. 3.1e+02;
Matches	13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	601 AATTTGACTGGGC 613 
Db	14 AATTTGACTGGGC 2
RESULT 314	
AR188699	17 bp DNA linear PAT 20-APR-2002
LOCUS	
DEFINITION	Sequence 4187 from patent US 6346398.
ACCESSION	AR188699
VERSION	AR188699.1 GI:20234664
KEYWORDS	.
SOURCE	Unknown.
ORGANISM	Unclassified.
REFERENCE	1 (bases 1 to 17)
AUTHORS	Pavco,P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.
TITLE	Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor
JOURNAL	Patent: US 6346398-A 4187 12-FEB-2002;
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Query Match	0.6%; Score 13; DB 1; Length 17;
Best Local Similarity	100.0%; Pred.No. 3.1e+02;
Matches	13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	72 AAGTCCTCAGTG 84 
Db	5 AAGTCCTCAGTG 17
RESULT 315	
AR188700	17 bp DNA linear PAT 20-APR-2002
LOCUS	
DEFINITION	Sequence 4188 from patent US 6346398.
ACCESSION	AR188700
VERSION	AR188700.1 GI:20234665
KEYWORDS	.
SOURCE	Unknown.
ORGANISM	Unclassified.
REFERENCE	1 (bases 1 to 17)
AUTHORS	Pavco,P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.
TITLE	Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor
JOURNAL	Patent: US 6346398-A 4188 12-FEB-2002;
FEATURES	
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DEFINITION	AR324552	Accession																										
ACCESSION	AR324552	Version																										
VERSION	AR324552.1	GI:33710360																										
KEYWORDS	Unknown.																											
SOURCE	Unknown.																											
ORGANISM	Unknown.																											
REFERENCE	Unclassified.																											
AUTHORS	1 (bases 1 to 17)																											
TITLE	Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.																											
JOURNAL	Method and reagent for the treatment of diseases or conditions																											
FEATURES	related to levels of vascular endothelial growth factor receptor																											
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QY	72	AAGTCCTCAGTG	84																									
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ACCESSION	AR324553	Version																										
VERSION	AR324553.1	GI:33710361																										
KEYWORDS	Unknown.																											
SOURCE	Unknown.																											
ORGANISM	Unknown.																											
REFERENCE	Unclassified.																											
AUTHORS	1 (bases 1 to 17)																											
TITLE	Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.																											
JOURNAL	Method and reagent for the treatment of diseases or conditions																											
FEATURES	related to levels of vascular endothelial growth factor receptor																											
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Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;																												
QY	72	AAGTCCTCAGTG	84																									
Db	1	AAGTCCTCAGTG	13																									
RESULT 323																												
LOCUS	AR325419	Sequence 2821 from patent US 6566127.	17 bp	RNA	linear	PAT 17-AUG-2003																						
DEFINITION	AR325419	Accession																										
ACCESSION	AR325419	Version																										
VERSION	AR325419.1	GI:33711227																										
KEYWORDS	Unknown.																											
SOURCE	Unknown.																											
ORGANISM	Unknown.																											
REFERENCE	Unclassified.																											
AUTHORS	1 (bases 1 to 17)																											
TITLE	Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.																											
JOURNAL	Method and reagent for the treatment of diseases or conditions																											
FEATURES	related to levels of vascular endothelial growth factor receptor																											
source	Patent: US 6566127-A 1955 20-MAY-2003;																											
LOCUS	Location/Qualifiers																											
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/mol_type="unassigned RNA"																												
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QY	72	AAGTCCTCAGTG	84																									
Db	1	AAGTCCTCAGTG	13																									
RESULT 324																												
LOCUS	AR325420	Sequence 2822 from patent US 6566127.	17 bp	RNA	linear	PAT 17-AUG-2003																						
DEFINITION	AR325420	Accession																										
ACCESSION	AR325420	Version																										
VERSION	AR325420.1	GI:33711228																										
KEYWORDS	Unknown.																											
SOURCE	Unknown.																											
ORGANISM	Unknown.																											
REFERENCE	Unclassified.																											
AUTHORS	1 (bases 1 to 17)																											
TITLE	Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.																											
JOURNAL	Method and reagent for the treatment of diseases or conditions																											
FEATURES	related to levels of vascular endothelial growth factor receptor																											
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Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;																												
QY	12	CTGTCTCTCAAGA	24																									
Db	2	CTGTCTCTCAAGA	14																									
RESULT 325																												
LOCUS	AR326949/c	Sequence 4351 from patent US 6566127.	17 bp	RNA	linear	PAT 17-AUG-2003																						
DEFINITION	AR326949	Accession																										
ACCESSION	AR326949	Version																										
VERSION	AR326949.1	GI:33712757																										
KEYWORDS	Unknown.																											
SOURCE	Unknown.																											
ORGANISM	Unknown.																											
REFERENCE	Unclassified.																											
AUTHORS	1 (bases 1 to 17)																											
TITLE	Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.																											
JOURNAL	Method and reagent for the treatment of diseases or conditions																											
FEATURES	related to levels of vascular endothelial growth factor receptor																											
source	Patent: US 6566127-A 4351 20-MAY-2003;																											
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Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;																												
QY	12	CTGTCTCTCAAGA	24																									
Db	2	CTGTCTCTCAAGA	14																									
RESULT 326																												
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DEFINITION	AR326949	Accession																										
ACCESSION	AR326949	Version																										
VERSION	AR326949.1	GI:33712757																										
KEYWORDS	Unknown.																											
SOURCE	Unknown.																											

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QY 601 AATTGACTGGC 613
Db 17 AATTGACTGGC 5

RESULT 326
AR327090 LOCUS 17 bp RNA linear PAT 17-AUG-2003
DEFINITION Sequence 4492 from patent US 6566127.
ACCESSION AR327090
VERSION AR327090.1 GI:33712898
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 17)
AUTHORS Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
TITLE Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor
JOURNAL Patent: US 6566127-A 4492 20-MAY-2003;
FEATURES Location/Qualifiers
source 1..17
/mol_type="unassigned RNA"

Query Match 0.6%; Score 13; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 3.1e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 984 ACCCTGTACCA 996
Db 5 ACCCTGTACCA 17

RESULT 327
AR327091 LOCUS 17 bp RNA linear PAT 17-AUG-2003
DEFINITION Sequence 4493 from patent US 6566127.
ACCESSION AR327091
VERSION AR327091.1 GI:33712899
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 17)
AUTHORS Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
TITLE Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor
JOURNAL Patent: US 6566127-A 4493 20-MAY-2003;
FEATURES Location/Qualifiers
source 1..17
/mol_type="unassigned RNA"

Query Match 0.6%; Score 13; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 3.1e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 984 ACCCTGTACCA 996
Db 4 ACCCTGTACCA 16

RESULT 328
AR329302 LOCUS 17 bp RNA linear PAT 17-AUG-2003
DEFINITION Sequence 6704 from patent US 6566127.
ACCESSION AR329302
VERSION AR329302.1 GI:33715110
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.

REFERENCE 1 (bases 1 to 17)
AUTHORS Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
TITLE Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor
JOURNAL Patent: US 6566127-A 6704 20-MAY-2003;
FEATURES Location/Qualifiers
source 1..17
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Query Match 0.6%; Score 13; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 3.1e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 984 ACCCTGTACCA 996
Db 4 ACCCTGTACCA 16

RESULT 329
AR329303 LOCUS 17 bp RNA linear PAT 17-AUG-2003
DEFINITION Sequence 6705 from patent US 6566127.
ACCESSION AR329303
VERSION AR329303.1 GI:33715111
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 17)
AUTHORS Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
TITLE Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor
JOURNAL Patent: US 6566127-A 6705 20-MAY-2003;
FEATURES Location/Qualifiers
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Query Match 0.6%; Score 13; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 3.1e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 72 AAGTCCCTCAGTG 84
Db 4 AAGTCCCTCAGTG 16

RESULT 330
AR329304 LOCUS 17 bp RNA linear PAT 17-AUG-2003
DEFINITION Sequence 6706 from patent US 6566127.
ACCESSION AR329304
VERSION AR329304.1 GI:33715112
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 17)
AUTHORS Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
TITLE Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor
JOURNAL Patent: US 6566127-A 6706 20-MAY-2003;
FEATURES Location/Qualifiers
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/mol_type="unassigned RNA"

Query Match 0.6%; Score 13; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 3.1e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 72 AAGTCCCTCAGTG 84
Db 3 AAGTCCCTCAGTG 15

RESULT 330
AR329304 LOCUS 17 bp RNA linear PAT 17-AUG-2003
DEFINITION Sequence 6706 from patent US 6566127.
ACCESSION AR329304
VERSION AR329304.1 GI:33715112
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 17)
AUTHORS Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
TITLE Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor
JOURNAL Patent: US 6566127-A 6706 20-MAY-2003;
FEATURES Location/Qualifiers
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Query Match 0.6%; Score 13; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 3.1e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 72 AAGTCCCTCAGTG 84
Db 3 AAGTCCCTCAGTG 15

RESULT 330
AR329304 LOCUS 17 bp RNA linear PAT 17-AUG-2003
DEFINITION Sequence 6706 from patent US 6566127.
ACCESSION AR329304
VERSION AR329304.1 GI:33715112
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 17)
AUTHORS Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
TITLE Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor
JOURNAL Patent: US 6566127-A 6706 20-MAY-2003;
FEATURES Location/Qualifiers
source 1..17
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Query Match 0.6%; Score 13; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 3.1e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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QY 72 AAGTCCCTCAGTG 84
Db 2 AAGTCCCTCAGTG 14

RESULT 331
AR398295
LOCUS AR398295 17 bp RNA linear PAT 18-DEC-2003
DEFINITION Sequence 676 from patent US 6617438.
ACCESSION AR398295
VERSION AR398295.1 GI:40135989
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 17)
AUTHORS Beigelman,L., Burgin,A.B., Beaudry,A., Karpelsky,A.,
Matulic-Adamic,J., Sweedler,D. and Zinnen,S.
TITLE Oligoribonucleotides with enzymatic activity
JOURNAL Patent: US 6617438-A 676 09-SEP-2003;
FEATURES Location/Qualifiers
source
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/organism="unknown"
/mol_type="unassigned RNA"

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Best Local Similarity 100.0%; Pred. No. 3.1e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 607 ACTGGGCAGTGGG 619
Db 4 ACTGGGCAGTGGG 16

RESULT 332
AR433898
LOCUS AR433898 17 bp DNA linear PAT 18-DEC-2003
DEFINITION Sequence 321 from patent US 6656700.
ACCESSION AR433898
VERSION AR433898.1 GI:40196741
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 17)
AUTHORS Gu,Y. and Shannon,M.E.
TITLE Isoforms of human pregnancy-associated protein-E
JOURNAL Patent: US 6656700-A 321 02-DEC-2003;
FEATURES Location/Qualifiers
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/organism="unknown"
/mol_type="genomic DNA"

Query Match 0.6%; Score 13; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 3.1e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1552 AGAAGAGAAAGAA 1564
Db 2 AGAAGAGAAAGAA 14

RESULT 333
AR433899
LOCUS AR433899 17 bp DNA linear PAT 18-DEC-2003
DEFINITION Sequence 322 from patent US 6656700.
ACCESSION AR433899
VERSION AR433899.1 GI:40196742
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 17)

AUTHORS Gu,Y. and Shannon,M.E.
TITLE Isoforms of human pregnancy-associated protein-E
JOURNAL Patent: US 6656700-A 322 02-DEC-2003;
FEATURES Location/Qualifiers
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1..17
/organism="unknown"
/mol_type="genomic DNA"

Query Match 0.6%; Score 13; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 3.1e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1552 AGAAGAGAAAGAA 1564
Db 1 AGAAGAGAAAGAA 13

RESULT 334
AR455374
LOCUS AR455374 17 bp DNA linear PAT 20-FEB-2004
DEFINITION Sequence 28 from patent US 6683189.
ACCESSION AR455374
VERSION AR455374.1 GI:42689920
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 17)
AUTHORS Deryan,P.B. and Baird,E.
TITLE Method for the synthesis of pyrrole and imidazole carboxamides on a
solid support
JOURNAL Patent: US 6683189-A 28 27-JAN-2004;
FEATURES Location/Qualifiers
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1..17
/organism="unknown"
/mol_type="genomic DNA"

Query Match 0.6%; Score 13; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 3.1e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1493 GCTGTTAAACAGG 1505
Db 1 GCTGTTAAACAGG 13

RESULT 335
AR422308
LOCUS AR422308 17 bp RNA linear PAT 19-JUN-2002
DEFINITION Sequence 644 from Patent WO0188124.
ACCESSION AR422308
VERSION AR422308.1 GI:21525690
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1
AUTHORS Jarvis,T., von Carlowitz,I., Mcswiggen,J.A., McLaughlin,F.G. and
Randi,A.M.
TITLE Method and reagent for the inhibition of erg
JOURNAL Patent: WO 0188124-A 644 22-NOV-2001;
FEATURES Location/Qualifiers
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/organism="Homo sapiens"
/mol_type="unassigned RNA"
/db_xref="taxon:9606"

Query Match 0.6%; Score 13; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 3.1e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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<p><b>Qy</b> 323 GACCATGTGGGC 335       <b>Db</b> 5 GACCATGTGGGC 17</p> <p><b>RESULT 336</b></p> <p><b>LOCUS</b> AX579598 17 bp RNA linear PAT 10-JAN-2003</p> <p><b>DEFINITION</b> Sequence 1436 from Patent WO0211674.</p> <p><b>ACCESSION</b> AX579598</p> <p><b>VERSION</b> AX579598.1 GI:27648800</p> <p><b>KEYWORDS</b> Homo sapiens (human)</p> <p><b>SOURCE</b> Homo sapiens</p> <p><b>ORGANISM</b> Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.</p> <p><b>REFERENCE</b> 1 Thompson, J., McSwiggen, J., McKenzie, T., Ayers, D., Szymkowski, D.E. and Grupe, A. Method and reagent for the inhibition of calcium activated chloride channel-1 (clca-1) Patent: WO 0211674-A 1436 14-FEB-2002; RIBOZYME PHARMACEUTICALS, INC. (US) ; Syntex (U.S.A.) LLC (US) ; Thompson, James (US)</p> <p><b>AUTHORS</b> Thompson, J., McSwiggen, J., McKenzie, T., Ayers, D., Szymkowski, D.E. and Grupe, A.</p> <p><b>TITLE</b> Method and reagent for the inhibition of calcium activated chloride channel-1 (clca-1)</p> <p><b>JOURNAL</b> Patent: WO 0211674-A 1436 14-FEB-2002; RIBOZYME PHARMACEUTICALS, INC. (US) ; Syntex (U.S.A.) LLC (US) ; Thompson, James (US)</p> <p><b>FEATURES</b> source 1..17 /organism="Homo sapiens" /mol_type="unassigned RNA" /db_xref="taxon:9606"</p> <p>Query Match 0.6%; Score 13; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 3.1e+02; Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;</p>	<p><b>Qy</b> 1586 TCAGCTGTGCCG 1598       <b>Db</b> 13 TCAGCTGTGCCG 1</p> <p><b>RESULT 337</b></p> <p><b>LOCUS</b> AX725032 17 bp DNA linear PAT 08-MAY-2003</p> <p><b>DEFINITION</b> Sequence 2719 from Patent WO03025176.</p> <p><b>ACCESSION</b> AX725032</p> <p><b>VERSION</b> AX725032.1 GI:30504375</p> <p><b>KEYWORDS</b> Mus musculus (house mouse)</p> <p><b>SOURCE</b> Mus musculus</p> <p><b>ORGANISM</b> Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.</p> <p><b>REFERENCE</b> 1 Telerman, A., Amson, R. and Tuijinder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines Patent: WO 03025176-A 2719 27-MAR-2003; Molecular Engines Laboratories (FR)</p> <p><b>AUTHORS</b> Telerman, A., Amson, R. and Tuijinder, M.</p> <p><b>TITLE</b> Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines</p> <p><b>JOURNAL</b> Patent: WO 03025176-A 2719 27-MAR-2003; Molecular Engines Laboratories (FR)</p> <p><b>FEATURES</b> source 1..17 /organism="Mus musculus" /mol_type="unassigned DNA" /db_xref="taxon:10090"</p> <p>Query Match 0.6%; Score 13; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 3.1e+02; Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;</p>	<p><b>Qy</b> 1720 ATCACTTTATCCCC 1732       <b>Db</b> 2 ATCACTTTATCCCC 14</p> <p><b>RESULT 338</b></p> <p><b>LOCUS</b> AX761979 17 bp DNA linear PAT 25-JUN-2003</p> <p><b>DEFINITION</b> Sequence 5300 from Patent WO03040369.</p> <p><b>ACCESSION</b> AX761979</p> <p><b>VERSION</b> AX761979.1 GI:32256595</p> <p><b>KEYWORDS</b> Homo sapiens (human)</p> <p><b>SOURCE</b> Homo sapiens</p>	<p><b>AX727074/c</b></p> <p><b>LOCUS</b> AX727074 17 bp DNA linear PAT 08-MAY-2003</p> <p><b>DEFINITION</b> Sequence 4761 from Patent WO03025176.</p> <p><b>ACCESSION</b> AX727074</p> <p><b>VERSION</b> AX727074.1 GI:30506417</p> <p><b>KEYWORDS</b> Mus musculus (house mouse)</p> <p><b>SOURCE</b> Mus musculus</p> <p><b>ORGANISM</b> Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.</p> <p><b>REFERENCE</b> 1 Telerman, A., Amson, R. and Tuijinder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines Patent: WO 03025176-A 4761 27-MAR-2003; Molecular Engines Laboratories (FR)</p> <p><b>AUTHORS</b> Telerman, A., Amson, R. and Tuijinder, M.</p> <p><b>TITLE</b> Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines</p> <p><b>JOURNAL</b> Patent: WO 03025176-A 4761 27-MAR-2003; Molecular Engines Laboratories (FR)</p> <p><b>FEATURES</b> source 1..17 /organism="Mus musculus" /mol_type="unassigned DNA" /db_xref="taxon:10090"</p> <p>Query Match 0.6%; Score 13; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 3.1e+02; Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;</p> <p><b>Qy</b> 169 CATGCTTCTTCT 181       <b>Db</b> 17 CATGCTTCTTCT 5</p> <p><b>RESULT 339</b></p> <p><b>LOCUS</b> AX734947 17 bp DNA linear PAT 08-MAY-2003</p> <p><b>DEFINITION</b> Sequence 537 from Patent WO03025177.</p> <p><b>ACCESSION</b> AX734947</p> <p><b>VERSION</b> AX734947.1 GI:30514224</p> <p><b>KEYWORDS</b> Homo sapiens (human)</p> <p><b>SOURCE</b> Homo sapiens</p> <p><b>ORGANISM</b> Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.</p> <p><b>REFERENCE</b> 1 Telerman, A., Amson, R. and Tuijinder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments Patent: WO 03025177-A 537 27-MAR-2003; Molecular Engines Laboratories (FR)</p> <p><b>AUTHORS</b> Telerman, A., Amson, R. and Tuijinder, M.</p> <p><b>TITLE</b> Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments</p> <p><b>JOURNAL</b> Patent: WO 03025177-A 537 27-MAR-2003; Molecular Engines Laboratories (FR)</p> <p><b>FEATURES</b> source 1..17 /organism="Homo sapiens" /mol_type="unassigned DNA" /db_xref="taxon:9606"</p> <p>Query Match 0.6%; Score 13; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 3.1e+02; Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;</p> <p><b>Qy</b> 621 TGTTTTTGTCATT 633       <b>Db</b> 5 TGTTTTTGTCATT 17</p> <p><b>RESULT 340</b></p> <p><b>LOCUS</b> AX761979 17 bp DNA linear PAT 25-JUN-2003</p> <p><b>DEFINITION</b> Sequence 5300 from Patent WO03040369.</p> <p><b>ACCESSION</b> AX761979</p> <p><b>VERSION</b> AX761979.1 GI:32256595</p> <p><b>KEYWORDS</b> Homo sapiens (human)</p> <p><b>SOURCE</b> Homo sapiens</p>
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ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Telerman,A., Anson,R. and Tuijnder,M.
TITLE Sequences involved in tumoral suppression, tumoral reversion,
apoptosis and/or viral resistance phenomena and their use as
medicines
JOURNAL Patent: WO 03040369-A 5300 15-MAY-2003;
FEATURES Molecular Engines Laboratories (FR)
source Location/Qualifiers
1..17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.6%; Score 13; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 3.1e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1653 RAGAAAATAAGA 1665
Db 5 RAGAAAATAAGA 17

RESULT 341
LOCUS AR146991 38 bp DNA linear PAT 08-AUG-2001
DEFINITION Sequence 51 from patent US 6221361.
ACCESSION AR146991
VERSION AR146991.1 GI:15110794
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 38)
AUTHORS Cochran,M.D. and Junker,D.E.
TITLE Recombinant swinepox virus
JOURNAL Patent: US 6221361-A 51 24-APR-2001;
FEATURES Location/Qualifiers
source 1..38
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 0.6%; Score 13; DB 1; Length 38;
Best Local Similarity 65.5%; Pred. No. 4.4e+02;
Matches 19; Conservative 0; Mismatches 10; Indels 0; Gaps 0;

QY 534 TCAAAATTACAGTGTGATTTACAACTTGAC 562
Db 10 TCATATTGCCACAGATGCGCAAAAGAC 38

RESULT 342
LOCUS A65734/c 16 bp DNA linear PAT 29-MAR-1999
DEFINITION Sequence 15 from Patent WO9735973.
ACCESSION A65734
VERSION A65734.1 GI:4531353
KEYWORDS
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1
AUTHORS Lenzen,G., Pietri-Rouxel,F., Drumare, Marie-Francoise and
Strosberg,A.D.
TITLE CANINE beta 2- AND beta 3-ADRENERGIC RECEPTORS AND USE THEREOF
JOURNAL Patent: WO 9735973-A 15 02-OCT-1997;
COMMENT VETIGEN (FR)
Other publication FR 2746813 19971003.
FEATURES Location/Qualifiers
source 1..16
/organism="unidentified"
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/mol_type="unassigned DNA"
/db_xref="taxon:32644"

Query Match 0.6%; Score 12.8; DB 1; Length 16;
Best Local Similarity 87.5%; Pred. No. 3.1e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 507 CTCGTCAGCGCCCAAGC 522
Db 16 CCCGTCAGCGCCCAAGC 1

RESULT 343
LOCUS A98342 16 bp DNA linear PAT 26-JAN-2000
DEFINITION Sequence 16 from Patent WO9913070.
ACCESSION A98342
VERSION A98342.1 GI:6781446
KEYWORDS
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 16)
AUTHORS Domdey,H. and Heumann,H.
TITLE t-RNA PRIMER, PRODUCTION AND USE FOR INHIBITING REVERSE
TRANSCRIPTASE
JOURNAL Patent: WO 9913070-A 16 18-MAR-1999;
FEATURES DOMDEY HORST (DE); HEUMANN HERMANN (DE)
source Location/Qualifiers
1..16
/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"

Query Match 0.6%; Score 12.8; DB 1; Length 16;
Best Local Similarity 87.5%; Pred. No. 3.1e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1133 CTGCTAGGGCTTCTGC 1148
Db 1 CTGCTAGGGCTTCTGGC 16

RESULT 344
LOCUS AR098673/c 16 bp DNA linear PAT 14-FEB-2001
DEFINITION Sequence 31 from patent US 6077668.
ACCESSION AR098673
VERSION AR098673.1 GI:12808439
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 16)
AUTHORS Kool,E.T.
TITLE Highly sensitive multimeric nucleic acid probes
JOURNAL Patent: US 6077668-A 31 20-JUN-2000;
FEATURES Location/Qualifiers
source 1..16
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 0.6%; Score 12.8; DB 1; Length 16;
Best Local Similarity 87.5%; Pred. No. 3.1e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 171 TCGTTTCTTCTTGCCT 186
Db 16 TCGTTTCTTCTTCTCT 1

RESULT 345
LOCUS AR098717/c
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LOCUS AR098717 16 bp DNA linear PAT 14-FEB-2001  
DEFINITION Sequence 75 from patent US 6077668.  
ACCESSION AR098717  
VERSION AR098717.1 GI:12808483  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE  
1 (bases 1 to 16)  
AUTHORS Kool,E.T.  
TITLE Highly sensitive multimeric nucleic acid probes  
JOURNAL Patent: US 6077668-A 75 20-JUN-2000;  
FEATURES Location/Qualifiers  
source  
1..16  
/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 0.6%; Score 12.8; DB 1; Length 16;  
Best Local Similarity 87.5%; Pred. No. 3.1e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 171 TGCTTTCTTCTTGCCCT 186  
Db 16 TCCTTTCTTCTTCTCT 1

LOCUS AR098718 16 bp DNA linear PAT 14-FEB-2001  
DEFINITION Sequence 76 from patent US 6077668.  
ACCESSION AR098718  
VERSION AR098718.1 GI:12808484  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE  
1 (bases 1 to 16)  
AUTHORS Kool,E.T.  
TITLE Highly sensitive multimeric nucleic acid probes  
JOURNAL Patent: US 6077668-A 76 20-JUN-2000;  
FEATURES Location/Qualifiers  
source  
1..16  
/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 0.6%; Score 12.8; DB 1; Length 16;  
Best Local Similarity 87.5%; Pred. No. 3.1e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 171 TGCTTTCTTCTTGCCCT 186  
Db 16 TCCTTTCTTCTTCTCT 1

LOCUS AR098724 16 bp DNA linear PAT 14-FEB-2001  
DEFINITION Sequence 82 from patent US 6077668.  
ACCESSION AR098724  
VERSION AR098724.1 GI:12808490  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE  
1 (bases 1 to 16)  
AUTHORS Kool,E.T.  
TITLE Highly sensitive multimeric nucleic acid probes  
JOURNAL Patent: US 6077668-A 82 20-JUN-2000;  
FEATURES Location/Qualifiers  
source  
1..16  
/organism="unknown"  
/mol\_type="unassigned DNA"

LOCUS AR105172 16 bp DNA linear PAT 14-FEB-2001  
DEFINITION Sequence 33 from patent US 6096513.  
ACCESSION AR105172  
VERSION AR105172.1 GI:12818769  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE  
1 (bases 1 to 16)  
AUTHORS Bell,G.I., Reisine,T. and Yasuda,K.  
TITLE Polynucleotides encoding KAPPA opiod receptors  
JOURNAL Patent: US 6096513-A 33 01-AUG-2000;  
FEATURES Location/Qualifiers  
source  
1..16  
/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 0.6%; Score 12.8; DB 1; Length 16;  
Best Local Similarity 87.5%; Pred. No. 3.1e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1995 TAGGCGCACCGTGTGG 2010  
Db 1 TAGTTCGACGGTGTGG 16

LOCUS AR178422 16 bp DNA linear PAT 20-APR-2002  
DEFINITION Sequence 33 from patent US 6319686.  
ACCESSION AR178422  
VERSION AR178422.1 GI:20219560  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE  
1 (bases 1 to 16)  
AUTHORS Bell,G.I., Reisine,T. and Yasuda,K.  
TITLE Nucleic acids encoding kappa opiod receptors  
JOURNAL Patent: US 6319686-A 33 20-NOV-2001;  
FEATURES Location/Qualifiers  
source  
1..16  
/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 0.6%; Score 12.8; DB 1; Length 16;  
Best Local Similarity 87.5%; Pred. No. 3.1e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1995 TAGGCGCACCGTGTGG 2010  
Db 1 TAGTTCGACGGTGTGG 16

LOCUS AR204747 16 bp DNA linear PAT 20-JUN-2002  
DEFINITION Sequence 31 from patent US 6368802.  
ACCESSION AR204747  
VERSION AR204747.1 GI:21502152  
KEYWORDS  
SOURCE Unknown.

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ORGANISM Unknown.
Unclassified.
REFERENCE 1 (bases 1 to 16)
AUTHORS Kool,E.F.
TITLE Circular DNA vectors for synthesis of RNA and DNA
JOURNAL Patent: US 636802-A 31 09-APR-2002;
FEATURES
    source
        1..16
        /organism="unknown"
        /mol_type="unassigned DNA"
Query Match
    Best Local Similarity 0.6%; Score 12.8; DB 1; Length 16;
    Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 171 TCGTTCTTCTTCCT 186
Db 16 TCGTTCTTCTTCTCT 1
RESULT 351
LOCUS AR233443 16 bp DNA linear PAT 20-DEC-2002
DEFINITION Sequence 72 from patent US 6458532.
ACCESSION AR233443
VERSION AR233443.1 GI:27276034
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.
REFERENCE 1 (bases 1 to 16)
AUTHORS Detera-Wadleigh,S.D., Yoshikawa,T., Sanders,A.R. and Esterling,L.E.
TITLE Polynucleotides encoding IMP.18p myo-inositol monophosphatase and
methods of detecting said polynucleotides
JOURNAL Patent: US 6458532-A 72 01-OCT-2002;
FEATURES
    source
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        /mol_type="genomic DNA"
Query Match
    Best Local Similarity 0.6%; Score 12.8; DB 1; Length 16;
    Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1901 GCGTGCATCTCTGAG 1916
Db 16 GCGTGCATCTCTGTG 1
RESULT 352
LOCUS AR435926 16 bp RNA linear PAT 18-DEC-2003
DEFINITION Sequence 185 from patent US 6656731.
ACCESSION AR435926
VERSION AR435926.1 GI:40199010
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.
REFERENCE 1 (bases 1 to 16)
AUTHORS Eckstein,F., Ludwig,J. and Beigelman,L.
TITLE Nucleic acid catalysts with endonuclease activity
JOURNAL Patent: US 6656731-A 185 02-DEC-2003;
FEATURES
    source
        1..16
        /organism="unknown"
        /mol_type="unassigned RNA"
Query Match
    Best Local Similarity 0.6%; Score 12.8; DB 1; Length 16;
    Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1658 AAATAGAGAGAAAAC 1673
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Db 1 AAATAGAGAGAAAAC 16
||||| || |||||
RESULT 353
LOCUS AX328331/c 16 bp RNA linear PAT 07-JAN-2002
DEFINITION Sequence 103 from Patent WO0183754.
ACCESSION AX328331
VERSION AX328331.1 GI:18098313
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Kruger,M., Welch,P.J. and Barber,J.R.
TITLE Cellular regulators of infectious agents and methods of use
JOURNAL Patent: WO 0183754-A 103 08-NOV-2001;
FEATURES
    Location/Qualifiers
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            1..16
            /organism="synthetic construct"
            /mol_type="unassigned RNA"
            /db_xref="taxon:32630"
            /note="Synthetic oligonucleotide"
Query Match
    Best Local Similarity 0.6%; Score 12.8; DB 1; Length 16;
    Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 379 TTTAGCCTGCTCTTTT 394
Db 16 TTTAGCCTGACTTCT 1
RESULT 354
LOCUS A52143 17 bp DNA linear PAT 11-MAR-1997
DEFINITION Sequence 9 from Patent WO9619579.
ACCESSION A52143
VERSION A52143.1 GI:2304748
KEYWORDS
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 17)
AUTHORS Hemmings,B.A. and Millward,T.A.
TITLE NUCLEAR PROTEIN SERINE/THREONINE KINASES
JOURNAL Patent: WO 9619579-A 9 27-JUN-1996;
COMMENT CIBA GEIGY AG (CH)
FEATURES
    Location/Qualifiers
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            /mol_type="unassigned DNA"
            /db_xref="taxon:32644"
Query Match
    Best Local Similarity 0.6%; Score 12.8; DB 1; Length 17;
    Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 174 TTTCTTCTTGCCTTTT 189
Db 1 TTTCTGCTTCTCTTTT 16
RESULT 355
LOCUS AR021241 17 bp DNA linear PAT 05-DEC-1998
DEFINITION Sequence 7 from patent US 5789551.
ACCESSION AR021241
VERSION AR021241.1 GI:3975856
KEYWORDS
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SOURCE      Unknown.
ORGANISM     Unclassified.
REFERENCE    1 (bases 1 to 17)
AUTHORS      Pestka,S.
TITLE        Human leukocyte interferon Hu-IFN-.alpha.001
JOURNAL      Patent: US 5789551-A 7 04-AUG-1998;
FEATURES     Location/Qualifiers
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              1..17
              /organism="unknown"
              /mol_type="unassigned DNA"

Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 12 CTGTCCTCCAAGACAT 27
Db 1 CTGTCCTCCATGAGAT 16

RESULT 356
AR023917/c
LOCUS      AR023917
DEFINITION Sequence 19 from patent US 5795761.
ACCESSION  AR023917
VERSION     AR023917.1 GI:3977211
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 17)
AUTHORS    Powers,D.B. and Anderson,S.
TITLE      Mutants of 2,5-diketo-D-gluconic acid (2,5-DKG) reductase A
JOURNAL    Patent: US 5795761-A 19 18-AUG-1998;
FEATURES   Location/Qualifiers
            source
            1..17
            /organism="unknown"
            /mol_type="unassigned DNA"

Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1355 CACGTTGAAGTGCCG 1370
Db 16 CAGGTTGAACGTCCG 1

RESULT 357
AR034105
LOCUS      AR034105
DEFINITION Sequence 11 from patent US 5869293.
ACCESSION  AR034105
VERSION     AR034105.1 GI:5949710
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 17)
AUTHORS    Pestka,S.
TITLE      DNA encoding human interferon IFN -.alpha.001
JOURNAL    Patent: US 5869293-A 11 09-FEB-1999;
FEATURES   Location/Qualifiers
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            1..17
            /organism="unknown"
            /mol_type="unassigned DNA"

Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 12 CTGTCCTCCAAGACAT 27
Db 1 CTGTCCTCCATGAGAT 16

RESULT 358
AR040983/c
LOCUS      AR040983
DEFINITION Sequence 10 from patent US 5811244.
ACCESSION  AR040983
VERSION     AR040983.1 GI:5961479
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 17)
AUTHORS    Frankel,W.N., Cox,G.A., Lutz,C.M. and Noebels,J.L.
TITLE      In vitro method for identifying a clinical disorder associated with
JOURNAL    Patent: US 5811244-A 10 22-SEP-1998;
FEATURES   Location/Qualifiers
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            /organism="unknown"
            /mol_type="unassigned DNA"

Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3 CAGGCTTCTCTCTCT 18
Db 16 CAGGCTTCGATGCTCT 1

RESULT 359
AR046814/c
LOCUS      AR046814
DEFINITION Sequence 1607 from patent US 5817796.
ACCESSION  AR046814
VERSION     AR046814.1 GI:5968279
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 17)
AUTHORS    Stinchcomb,D.T., Draper,K., McSwiggen,J. and Jarvis,T.
TITLE      C-myb ribozymes having 2'-5'-linked adenylylate residues
JOURNAL    Patent: US 5817796-A 1607 06-OCT-1998;
FEATURES   Location/Qualifiers
            source
            1..17
            /organism="unknown"
            /mol_type="unassigned DNA"

Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1377 TTTCATCCGATTCGGC 1392
Db 16 TTTCATCCGATTCGGC 1

RESULT 360
AR067435/c
LOCUS      AR067435
DEFINITION Sequence 35 from patent US 5851763.
ACCESSION  AR067435
VERSION     AR067435.1 GI:5998657
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 17)
AUTHORS    Heym,B., Cole,S., Young,D., Zhang,Y., Honore,N., Telenti,A. and

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Bodmer,T.
Rapid detection of antibiotic resistance in mycobacterium
tuberculosis
Patent: US 5851763-A 35 22-DEC-1998;
LOCUS       1. .17
DEFINITION  /organism="unknown"
            /mol_type="unassigned DNA"
Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 898 CTGTCATCATAGAGAA 913
Db 17 CAGTCATCATAGGGA 2

RESULT 361
AR084693
LOCUS       AR084693              17 bp      DNA      linear      PAT 01-SEP-2000
DEFINITION  Sequence 9 from patent US 5981205.
ACCESSION   AR084693
VERSION     AR084693.1  GI:10011463
KEYWORDS    .
SOURCE      Unknown.
ORGANISM    Unknown.
REFERENCE   1 (bases 1 to 17)
AUTHORS    Hemmings,B.Arthur. and Millward,T.Anders.
TITLE      Nuclear Dbf2- related (Ndr) kinases
JOURNAL     Patent: US 5981205-A 9 09-NOV-1999;
FEATURES    Location/Qualifiers
            source
                1..17
                    /organism="unknown"
                    /mol_type="unassigned DNA"

Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 174 TTCTCTTCCTTCCTTTT 189
Db 1 TTCTCTTCCTTCCTTTT 16

RESULT 362
AR093906
LOCUS       AR093906              17 bp      DNA      linear      PAT 08-SEP-2000
DEFINITION  Sequence 11 from patent US 6001589.
ACCESSION   AR093906
VERSION     AR093906.1  GI:10020651
KEYWORDS    .
SOURCE      Unknown.
ORGANISM    Unknown.
REFERENCE   1 (bases 1 to 17)
AUTHORS    Pestka,S.
TITLE      Method of identifying proteins modified by disease states related
            thereto
JOURNAL     Patent: US 6001589-A 11 14-DEC-1999;
FEATURES    Location/Qualifiers
            source
                1..17
                    /organism="unknown"
                    /mol_type="unassigned DNA"

Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 12 CTGTCTCTCAAGACAT 27
Db 1 CTGTCTCTCAAGAT 16

Bodmer,T.
Rapid detection of antibiotic resistance in mycobacterium
tuberculosis
Patent: US 5851763-A 35 22-DEC-1998;
LOCUS       1. .17
DEFINITION  /organism="unknown"
            /mol_type="unassigned DNA"
Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 898 CTGTCATCATAGAGAA 913
Db 17 CAGTCATCATAGGGA 2

RESULT 361
AR084693
LOCUS       AR084693              17 bp      DNA      linear      PAT 01-SEP-2000
DEFINITION  Sequence 9 from patent US 5981205.
ACCESSION   AR084693
VERSION     AR084693.1  GI:10011463
KEYWORDS    .
SOURCE      Unknown.
ORGANISM    Unknown.
REFERENCE   1 (bases 1 to 17)
AUTHORS    Hemmings,B.Arthur. and Millward,T.Anders.
TITLE      Nuclear Dbf2- related (Ndr) kinases
JOURNAL     Patent: US 5981205-A 9 09-NOV-1999;
FEATURES    Location/Qualifiers
            source
                1..17
                    /organism="unknown"
                    /mol_type="unassigned DNA"

Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 174 TTCTCTTCCTTCCTTTT 189
Db 1 TTCTCTTCCTTCCTTTT 16

RESULT 362
AR093906
LOCUS       AR093906              17 bp      DNA      linear      PAT 08-SEP-2000
DEFINITION  Sequence 11 from patent US 6001589.
ACCESSION   AR093906
VERSION     AR093906.1  GI:10020651
KEYWORDS    .
SOURCE      Unknown.
ORGANISM    Unknown.
REFERENCE   1 (bases 1 to 17)
AUTHORS    Pestka,S.
TITLE      Method of identifying proteins modified by disease states related
            thereto
JOURNAL     Patent: US 6001589-A 11 14-DEC-1999;
FEATURES    Location/Qualifiers
            source
                1..17
                    /organism="unknown"
                    /mol_type="unassigned DNA"

Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 12 CTGTCTCTCAAGACAT 27
Db 1 CTGTCTCTCAAGAT 16

RESULT 363
BD197622/c
LOCUS       BD197622              17 bp      RNA      linear      PAT 17-JUL-2003
DEFINITION  Method and reagent for treating diseases or conditions concerning
            molecule participating in vasculogenic response.
ACCESSION   BD197622
VERSION     BD197622.1  GI:33007392
KEYWORDS    JP 2002509721-A/648.
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1 (bases 1 to 17)
AUTHORS    Pavco,P.A., Roberts,E., Jarvis,T., Coeshott,C. and Mcswiggen,J.A.
TITLE      Method and reagent for treating diseases or conditions concerning
            molecule participating in vasculogenic response
JOURNAL     Patent: JP 2002509721-A 648 02-APR-2002;
            RIBOZYME PHARMACEUTICALS INC
COMMENT     OS Homo sapiens (human)
            PN JP 2002509721-A/648
            PD 02-APR-2002
            PF 24-MAR-1999 JP 2000541291
            PR 27-MAR-1998 US 60/079678
            PI PAMELA A PAVCO,ELISABETH ROBERTS,THALE JARVIS,CLAIRE COESHOTT,
            PI JAMES A MCSWIGGEN
            PC
            C12N15/09,A61K31/7088,A61K31/7125,A61K48/00,A61P3/10,A61P17/06, PC
            A61P29/00,
            PC A61P35/00,A61P43/00,C12N5/10,C12N9/00//A61K35/76,C12N15/00, PC
            C12N5/00
            CC Method and reagent for treating diseases or conditions CC
            concerning molecule
            CC participating in vasculogenic response
            FH Key Location/Qualifiers
            FT source
                1..17
                    /organism='Homo sapiens (human)'
                    /db_xref="taxon:9606"

Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1483 TGGCAGAAAGCTGTT 1498
Db 17 TGGGAGAAATAGCTGTT 2

RESULT 364
BD198706
LOCUS       BD198706              17 bp      RNA      linear      PAT 17-JUL-2003
DEFINITION  Method and reagent for treating diseases or conditions concerning
            molecule participating in vasculogenic response.
ACCESSION   BD198706
VERSION     BD198706.1  GI:33008476
KEYWORDS    JP 2002509721-A/1732.
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1 (bases 1 to 17)
AUTHORS    Pavco,P.A., Roberts,E., Jarvis,T., Coeshott,C. and Mcswiggen,J.A.
TITLE      Method and reagent for treating diseases or conditions concerning
            molecule participating in vasculogenic response
JOURNAL     Patent: JP 2002509721-A 1732 02-APR-2002;
            RIBOZYME PHARMACEUTICALS INC
COMMENT     OS Homo sapiens (human)
            PN JP 2002509721-A/1732
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PD 02-APR-2002  
PF 24-MAR-1999 JP 2000541291  
PR 27-MAR-1998 US 60/079678  
PI PAMELA A PAVCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT,  
PI JAMES A MCSWIGGEN  
PC  
C12N15/09, A61K31/7125, A61K48/00, A61P3/10, A61P17/06, PC  
A61P29/00,  
PC A61P35/00, A61P43/00, C12N5/10, C12N9/00//A61K35/76, C12N15/00, PC  
C12N5/00  
CC Method and reagent for treating diseases or conditions CC  
CC participating in vasculogenic response  
FH Key Location/Qualifiers  
FT source 1. .17  
/organism="Homo sapiens (human)"  
/location/Qualifiers  
1. .17  
/organism="Homo sapiens"  
/mol\_type="genomic RNA"  
/db\_xref="taxon:9606"

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1262 GGGGTGCTACTCGCCA 1277  
Db 2 GGAAGTCTACTCGCCA 17

RESULT 365  
BD201420/c  
LOCUS  
DEFINITION  
Method and reagent for treating diseases or conditions concerning  
molecule participating in vasculogenic response.  
ACCESSION  
BD201420  
VERSION  
BD201420.1 GI:33011190  
KEYWORDS  
JP 2002509721-A/4446  
SOURCE  
Homo sapiens (human)  
ORGANISM  
Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
REFERENCE  
1 (bases 1 to 17)  
AUTHORS  
Pavco, P.A., Roberts, E., Jarvis, T., Coeshott, C. and Mcswiggen, J.A.  
TITLE  
Method and reagent for treating diseases or conditions concerning  
molecule participating in vasculogenic response  
JOURNAL  
Patent: JP 2002509721-A 4446 02-APR-2002;  
RIBOZYME PHARMACEUTICALS INC  
COMMENT  
OS Homo sapiens (human)  
PN JP 2002509721-A/4446  
PD 02-APR-2002  
PF 24-MAR-1999 JP 2000541291  
PR 27-MAR-1998 US 60/079678  
PI PAMELA A PAVCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT,  
PI JAMES A MCSWIGGEN  
PC  
C12N15/09, A61K31/7125, A61K48/00, A61P3/10, A61P17/06, PC  
A61P29/00,  
PC A61P35/00, A61P43/00, C12N5/10, C12N9/00//A61K35/76, C12N15/00, PC  
C12N5/00  
CC Method and reagent for treating diseases or conditions CC  
CC participating in vasculogenic response  
FH Key Location/Qualifiers  
FT source 1. .17  
/organism="Homo sapiens"  
/mol\_type="genomic RNA"  
/db\_xref="taxon:9606"

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1262 GGGGTGCTACTCGCCA 1277  
Db 2 GGAAGTCTACTCGCCA 17

RESULT 365  
BD201420/c  
LOCUS  
DEFINITION  
Method and reagent for treating diseases or conditions concerning  
molecule participating in vasculogenic response.  
ACCESSION  
BD201420  
VERSION  
BD201420.1 GI:33011190  
KEYWORDS  
JP 2002509721-A/4446  
SOURCE  
Homo sapiens (human)  
ORGANISM  
Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
REFERENCE  
1 (bases 1 to 17)  
AUTHORS  
Pavco, P.A., Roberts, E., Jarvis, T., Coeshott, C. and Mcswiggen, J.A.  
TITLE  
Method and reagent for treating diseases or conditions concerning  
molecule participating in vasculogenic response  
JOURNAL  
Patent: JP 2002509721-A 4446 02-APR-2002;  
RIBOZYME PHARMACEUTICALS INC  
COMMENT  
OS Homo sapiens (human)  
PN JP 2002509721-A/4446  
PD 02-APR-2002  
PF 24-MAR-1999 JP 2000541291  
PR 27-MAR-1998 US 60/079678  
PI PAMELA A PAVCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT,  
PI JAMES A MCSWIGGEN  
PC  
C12N15/09, A61K31/7125, A61K48/00, A61P3/10, A61P17/06, PC  
A61P29/00,  
PC A61P35/00, A61P43/00, C12N5/10, C12N9/00//A61K35/76, C12N15/00, PC  
C12N5/00  
CC Method and reagent for treating diseases or conditions CC  
CC participating in vasculogenic response  
FH Key Location/Qualifiers  
FT source 1. .17  
/organism="Homo sapiens"  
/mol\_type="genomic RNA"  
/db\_xref="taxon:9606"

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1262 GGGGTGCTACTCGCCA 1277  
Db 2 GGAAGTCTACTCGCCA 17

RESULT 365  
BD201420/c  
LOCUS  
DEFINITION  
Method and reagent for treating diseases or conditions concerning  
molecule participating in vasculogenic response.  
ACCESSION  
BD201420  
VERSION  
BD201420.1 GI:33011190  
KEYWORDS  
JP 2002509721-A/4446  
SOURCE  
Homo sapiens (human)  
ORGANISM  
Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
REFERENCE  
1 (bases 1 to 17)  
AUTHORS  
Pavco, P.A., Roberts, E., Jarvis, T., Coeshott, C. and Mcswiggen, J.A.  
TITLE  
Method and reagent for treating diseases or conditions concerning  
molecule participating in vasculogenic response  
JOURNAL  
Patent: JP 2002509721-A 4446 02-APR-2002;  
RIBOZYME PHARMACEUTICALS INC  
COMMENT  
OS Homo sapiens (human)  
PN JP 2002509721-A/4446  
PD 02-APR-2002  
PF 24-MAR-1999 JP 2000541291  
PR 27-MAR-1998 US 60/079678  
PI PAMELA A PAVCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT,  
PI JAMES A MCSWIGGEN  
PC  
C12N15/09, A61K31/7125, A61K48/00, A61P3/10, A61P17/06, PC  
A61P29/00,  
PC A61P35/00, A61P43/00, C12N5/10, C12N9/00//A61K35/76, C12N15/00, PC  
C12N5/00  
CC Method and reagent for treating diseases or conditions CC  
CC participating in vasculogenic response  
FH Key Location/Qualifiers  
FT source 1. .17  
/organism="Homo sapiens"  
/mol\_type="genomic RNA"  
/db\_xref="taxon:9606"

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 413 TGAATGTTTAAAGTATG 428  
Db 16 TGAATGTTTAAAGTATG 1

RESULT 366  
BD202792  
LOCUS  
DEFINITION  
Method and reagent for treating diseases or conditions concerning  
molecule participating in vasculogenic response.  
ACCESSION  
BD202792  
VERSION  
BD202792.1 GI:33012562  
KEYWORDS  
JP 2002509721-A/5818  
SOURCE  
Homo sapiens (human)  
ORGANISM  
Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
REFERENCE  
1 (bases 1 to 17)  
AUTHORS  
Pavco, P.A., Roberts, E., Jarvis, T., Coeshott, C. and Mcswiggen, J.A.  
TITLE  
Method and reagent for treating diseases or conditions concerning  
molecule participating in vasculogenic response  
JOURNAL  
Patent: JP 2002509721-A 5818 02-APR-2002;  
RIBOZYME PHARMACEUTICALS INC  
COMMENT  
OS Homo sapiens (human)  
PN JP 2002509721-A/5818  
PD 02-APR-2002  
PF 24-MAR-1999 JP 2000541291  
PR 27-MAR-1998 US 60/079678  
PI PAMELA A PAVCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT,  
PI JAMES A MCSWIGGEN  
PC  
C12N15/09, A61K31/7125, A61K48/00, A61P3/10, A61P17/06, PC  
A61P29/00,  
PC A61P35/00, A61P43/00, C12N5/10, C12N9/00//A61K35/76, C12N15/00, PC  
C12N5/00  
CC Method and reagent for treating diseases or conditions CC  
CC participating in vasculogenic response  
FH Key Location/Qualifiers  
FT source 1. .17  
/organism="Homo sapiens"  
/mol\_type="genomic RNA"  
/db\_xref="taxon:9606"

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 174 TTTCTCTTCGCTTTT 189  
Db 1 TTTCTCTTCGCTTTT 16

RESULT 367  
BD241305/c  
LOCUS  
DEFINITION  
Methods and products related to genotyping and DNA analysis.  
ACCESSION  
BD241305  
VERSION  
BD241305.1 GI:33051075  
KEYWORDS  
JP 2002525127-A/252  
SOURCE  
Homo sapiens (human)  
ORGANISM  
Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
REFERENCE  
1 (bases 1 to 17)  
AUTHORS  
Landers, J.E., Jordan, B., Housman, D.E. and Charest, A.

TITLE  
JOURNAL  
COMMENT

Methods and products related to genotyping and DNA analysis  
Patent: JP 2002525127-A 252 13-AUG-2002;  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
OS Homo sapiens (human)  
PN JP 2002525127-A/252  
PD 13-AUG-2002  
PF 24-SEP-1999 JP 2000572407  
PI JOHN E LANDERS, BARBARA JORDAN, DAVID E HOUSMAN, ALAIN CHAREST PC  
C12N15/09, C12Q1/68, G01N33/53, G01N33/566, G01N33/58, G01N37/00, PC  
G01N37/00,  
PC C12N15/00  
CC Methods and products related to genotyping and DNA analysis FH  
KEY Location/Qualifiers  
FT source 1..17  
FT /organism='Homo sapiens (human)'.  
FEATURES  
source  
1..17  
/organism="Homo sapiens"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:9606"

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 386 TGCTCTTTTGGCATTC 401  
DB 17 TGCTCTTTTGGCATTC 2

RESULT 368  
BD254127  
LOCUS 17 bp DNA linear PAT 17-JUL-2003  
DEFINITION Regulation of repressor genes using nucleic acid molecules.  
ACCESSION BD254127  
VERSION BD254127.1 GI:33063897  
KEYWORDS JP 2002541795-A/1920.  
SOURCE unidentified  
ORGANISM unclassified.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Blatt, L., Zwick, M., Pavco, P. and Mcswiggen, J.  
TITLE Regulation of repressor genes using nucleic acid molecules  
JOURNAL Patent: JP 2002541795-A 1920 10-DEC-2002;  
RIBOZYME PHARMACEUTICALS INC  
COMMENT OS Eukaryote  
PN JP 2002541795-A/1920  
PD 10-DEC-2002  
PF 11-APR-2000 JP 2000611654  
PI LAWRENCE BLATT, MICHAEL ZWICK, PAMELA PAVCO, JAMES MCSWIGGEN PC  
C12N15/09, A61K38/00, A61P43/00, A61P43/00, C12N5/10, PC  
C12P21/02,  
PC  
C12P21/02, C12P21/02//A61K31/711, (C12N5/10, C12R1:91), (C12P21/02, PC  
C12R1:91),  
PC (C12P21/02, C12R1:91), (C12P21/02, C12R1:91), C12N15/00, C12N5/00,  
PC A61K37/02, C12R1:91)  
PC (C12N5/00, C12R1:91)  
CC Regulation of repressor genes using nucleic acid molecules FH  
KEY Location/Qualifiers  
FT source 1..17  
FT /organism='Eukaryote'.  
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source  
1..17  
/organism="unidentified"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32644"

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1148 CACCTTTTGGCTTCC 1163  
DB 1 CACCTTTTGGCTTCC 16

RESULT 370  
BD254222/c  
LOCUS 17 bp DNA linear PAT 17-JUL-2003  
DEFINITION Regulation of repressor genes using nucleic acid molecules.  
ACCESSION BD254222  
VERSION BD254222.1 GI:33063992  
KEYWORDS JP 2002541795-A/2015.  
SOURCE unidentified  
ORGANISM unclassified.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Blatt, L., Zwick, M., Pavco, P. and Mcswiggen, J.  
TITLE Regulation of repressor genes using nucleic acid molecules  
JOURNAL Patent: JP 2002541795-A 2015 10-DEC-2002;  
RIBOZYME PHARMACEUTICALS INC  
COMMENT OS Eukaryote  
PN JP 2002541795-A/2015  
PD 10-DEC-2002  
PF 11-APR-2000 JP 2000611654

QY 1148 CACCTTTTGGCTTCC 1163  
DB 2 CACCTTTTGGCTTCC 17

RESULT 369  
BD254128  
LOCUS 17 bp DNA linear PAT 17-JUL-2003  
DEFINITION Regulation of repressor genes using nucleic acid molecules.  
ACCESSION BD254128  
VERSION BD254128.1 GI:33063898  
KEYWORDS JP 2002541795-A/1921.  
SOURCE unidentified  
ORGANISM unclassified.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Blatt, L., Zwick, M., Pavco, P. and Mcswiggen, J.  
TITLE Regulation of repressor genes using nucleic acid molecules  
JOURNAL Patent: JP 2002541795-A 1921 10-DEC-2002;  
RIBOZYME PHARMACEUTICALS INC  
COMMENT OS Eukaryote  
PN JP 2002541795-A/1921  
PD 10-DEC-2002  
PF 11-APR-2000 JP 2000611654  
PI LAWRENCE BLATT, MICHAEL ZWICK, PAMELA PAVCO, JAMES MCSWIGGEN PC  
C12N15/09, A61K38/00, A61K48/00, A61P43/00, A61P43/00, C12N5/10, PC  
C12P21/02,  
PC  
C12P21/02, C12P21/02//A61K31/711, (C12N5/10, C12R1:91), (C12P21/02, PC  
C12R1:91),  
PC (C12P21/02, C12R1:91), (C12P21/02, C12R1:91), C12N15/00, C12N5/00,  
PC A61K37/02, C12R1:91)  
PC (C12N5/00, C12R1:91)  
CC Regulation of repressor genes using nucleic acid molecules FH  
KEY Location/Qualifiers  
FT source 1..17  
FT /organism='Eukaryote'.  
FEATURES  
source  
1..17  
/organism="unidentified"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32644"

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1148 CACCTTTTGGCTTCC 1163  
DB 1 CACCTTTTGGCTTCC 16

RESULT 370  
BD254222/c  
LOCUS 17 bp DNA linear PAT 17-JUL-2003  
DEFINITION Regulation of repressor genes using nucleic acid molecules.  
ACCESSION BD254222  
VERSION BD254222.1 GI:33063992  
KEYWORDS JP 2002541795-A/2015.  
SOURCE unidentified  
ORGANISM unclassified.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Blatt, L., Zwick, M., Pavco, P. and Mcswiggen, J.  
TITLE Regulation of repressor genes using nucleic acid molecules  
JOURNAL Patent: JP 2002541795-A 2015 10-DEC-2002;  
RIBOZYME PHARMACEUTICALS INC  
COMMENT OS Eukaryote  
PN JP 2002541795-A/2015  
PD 10-DEC-2002  
PF 11-APR-2000 JP 2000611654

PR 12-APR-1999 US 60/129390  
PI LAWRENCE BLATT, MICHAEL ZWICK, PAMELA PAVCO, JAMES MCSWIGGEN PC  
C12N15/09, A61K38/00, A61P43/00, A61P43/00, A61P43/00, C12N5/10, PC  
C12P21/02,  
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C12R1:91),  
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QY 428 GTTGGGAAATGCTTG 443  
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DB 17 GTTGGGAAATGCTTG 2

RESULT 371  
BD254223/C  
LOCUS  
DEFINITION  
ACCESSION  
VERSION  
KEYWORDS  
SOURCE  
ORGANISM  
REFERENCE  
AUTHORS  
TITLE  
JOURNAL  
COMMENT  
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Regulation of repressor genes using nucleic acid molecules  
PATENT: JP 2002541795-A 2016 10-DEC-2002;  
RIBOZYME PHARMACEUTICALS INC  
OS Eukaryote  
PN JP 2002541795-A/2016  
PD 10-DEC-2002  
PF 11-APR-2000 JP 2000611654  
PR 12-APR-1999 US 60/129390  
PI LAWRENCE BLATT, MICHAEL ZWICK, PAMELA PAVCO, JAMES MCSWIGGEN PC  
C12N15/09, A61K38/00, A61P43/00, A61P43/00, A61P43/00, C12N5/10, PC  
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DB 17 GTTGGGAAATGCTTG 2

RESULT 371  
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LOCUS  
DEFINITION  
ACCESSION  
VERSION  
KEYWORDS  
SOURCE  
ORGANISM  
REFERENCE  
AUTHORS  
TITLE  
JOURNAL  
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Regulation of repressor genes using nucleic acid molecules  
PATENT: JP 2002541795-A 2016 10-DEC-2002;  
RIBOZYME PHARMACEUTICALS INC  
OS Eukaryote  
PN JP 2002541795-A/2016  
PD 10-DEC-2002  
PF 11-APR-2000 JP 2000611654  
PR 12-APR-1999 US 60/129390  
PI LAWRENCE BLATT, MICHAEL ZWICK, PAMELA PAVCO, JAMES MCSWIGGEN PC  
C12N15/09, A61K38/00, A61P43/00, A61P43/00, A61P43/00, C12N5/10, PC  
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DB 16 GTTGGGAAATGCTTG 1  
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RESULT 372  
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LOCUS  
DEFINITION  
ACCESSION  
VERSION  
KEYWORDS  
SOURCE  
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REFERENCE  
AUTHORS  
TITLE  
JOURNAL  
COMMENT  
BD254566  
Regulation of repressor genes using nucleic acid molecules  
PATENT: JP 2002541795-A 2359 10-DEC-2002;  
RIBOZYME PHARMACEUTICALS INC  
OS Eukaryote  
PN JP 2002541795-A/2359  
PD 10-DEC-2002  
PF 11-APR-2000 JP 2000611654  
PR 12-APR-1999 US 60/129390  
PI LAWRENCE BLATT, MICHAEL ZWICK, PAMELA PAVCO, JAMES MCSWIGGEN PC  
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C12P21/02,  
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C12P21/02, C12P21/02//A61K31/711, (C12N5/10, C12R1:91), (C12P21/02, PC  
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DB 2 GAAATTAAGAGAGAA 17  
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DEFINITION  
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ORGANISM  
REFERENCE  
AUTHORS  
TITLE  
JOURNAL  
COMMENT  
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Regulation of repressor genes using nucleic acid molecules  
PATENT: JP 2002541795-A 2869 10-DEC-2002;  
RIBOZYME PHARMACEUTICALS INC  
OS Eukaryote  
PN JP 2002541795-A/2869  
PD 10-DEC-2002  
PF 11-APR-2000 JP 2000611654  
PR 12-APR-1999 US 60/129390  
PI LAWRENCE BLATT, MICHAEL ZWICK, PAMELA PAVCO, JAMES MCSWIGGEN PC  
C12N15/09, A61K38/00, A61P43/00, A61P43/00, A61P43/00, C12N5/10, PC  
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C12R1:91),  
PC (C12P21/02, C12R1:91), (C12P21/02, C12R1:91), C12N15/00, C12N5/00,  
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DB 2 GAAATTAAGAGAGAA 17  
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PC (C12P21/02,C12R1:91),(C12P21/02,C12R1:91),C12N15/00,C12N5/00,
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Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1124 CGCGCGCGACTGCTAG 1139
DB 16 CGCGCGCGACAGCGAG 1
RESULT 374
BD255223
LOCUS 17 bp DNA linear PAT 17-JUL-2003
DEFINITION Regulation of repressor genes using nucleic acid molecules.
ACCESSION BD255223
VERSION BD255223.1 GI:33064993
KEYWORDS JP 2002541795-A/3016.
SOURCE unclassified
ORGANISM unclassified.
REFERENCE 1 (bases 1 to 17)
AUTHORS Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.
TITLES Regulation of repressor genes using nucleic acid molecules
JOURNAL Patent: JP 2002541795-A 3016 10-DEC-2002;
RIBOZYME PHARMACEUTICALS INC
COMMENT OS Eukaryote
PN JP 2002541795-A/3016
PD 10-DEC-2002
PF 11-APR-2000 JP 2000611654
PR 12-APR-1999 US 60/129390
PI LAWRENCE BLATT,MICHAEL ZWICK,PAMELA PAVCO,JAMES MCSWIGGEN PC
C12N15/09,A61K38/00,A61K48/00,A61P43/00,A61P43/00,C12N5/10, PC
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PC (C12P21/02,C12R1:91),(C12P21/02,C12R1:91),C12N15/00,C12N5/00,
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CC Regulation of repressor genes using nucleic acid molecules FH
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Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1131 AAGTACATTCTGCGCC 1346
DB 1 AAATATATTCTGCGCC 16
RESULT 376
BD259576/c
LOCUS 17 bp DNA linear PAT 17-JUL-2003
DEFINITION Regulation of repressor genes using nucleic acid molecules.
ACCESSION BD259576
VERSION BD259576.1 GI:33069346
KEYWORDS JP 2002541795-A/7369.
SOURCE unclassified
ORGANISM unclassified.
REFERENCE 1 (bases 1 to 17)
AUTHORS Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.
TITLES Regulation of repressor genes using nucleic acid molecules
JOURNAL Patent: JP 2002541795-A 7369 10-DEC-2002;
RIBOZYME PHARMACEUTICALS INC
COMMENT OS Eukaryote
PN JP 2002541795-A/7369
PD 10-DEC-2002
PF 11-APR-2000 JP 2000611654
PR 12-APR-1999 US 60/129390
PI LAWRENCE BLATT,MICHAEL ZWICK,PAMELA PAVCO,JAMES MCSWIGGEN PC
C12N15/09,A61K38/00,A61K48/00,A61P43/00,A61P43/00,C12N5/10, PC
C12P21/02,
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C12P21/02,C12P21/02//A61K31/711,(C12N5/10,C12R1:91),(C12P21/02, PC
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CC Regulation of repressor genes using nucleic acid molecules FH
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Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 175 TTCTTCTGCTTTTC 190
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Db	1 CGAACCATGAGCTGG 16		
<p> <b>RESULT 379</b>  <b>LOCUS</b> </p>			
QY	CQ623253	17 bp	DNA
DEFINITION	Sequence 7993 from Patent WO0192524.		
ACCESSION	CQ623253		
VERSION	CQ623253.1 GI:41673471		
KEYWORDS	Homo sapiens (human)		
SOURCE	Homo sapiens		
ORGANISM	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.		
REFERENCE	1 Gu, Y., Ji, Y., Penn, S.G., Hanzel, D.K., Rank, D.R., Chen, W. and Shannon, M.E.		
AUTHORS	Myosin-like gene expressed in human heart and muscle		
TITLE	Patent: WO 0192524-A 7993 06-DEC-2001;		
JOURNAL	Aeomica, Inc. (US)		
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QY	1536 AACACCGGCAAGCAGC 1551		
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QY	CQ623254	17 bp	DNA
DEFINITION	Sequence 7994 from Patent WO0192524.		
ACCESSION	CQ623254		
VERSION	CQ623254.1 GI:41673472		
KEYWORDS	Homo sapiens (human)		
SOURCE	Homo sapiens		
ORGANISM	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.		
REFERENCE	1 Gu, Y., Ji, Y., Penn, S.G., Hanzel, D.K., Rank, D.R., Chen, W. and Shannon, M.E.		
AUTHORS	Myosin-like gene expressed in human heart and muscle		
TITLE	Patent: WO 0192524-A 7994 06-DEC-2001;		
JOURNAL	Aeomica, Inc. (US)		
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Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1536 AACACGGCAAGCAGC 1551  
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Db 1 AACACATCAAGCAGC 16

RESULT 381  
CQ624816

LOCUS CQ624816 17 bp DNA linear PAT 02-FEB-2004  
DEFINITION Sequence 9556 from Patent WO0192524.  
ACCESSION CQ624816  
VERSION CQ624816.1 GI:41675034  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
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AUTHORS Gu, Y., Ji, Y., Penn, S.G., Hanzel, D.K., Rank, D.R., Chen, W. and  
Shannon, M.E.  
TITLE Myosin-like gene expressed in human heart and muscle  
JOURNAL Patent: WO 0192524-A 9556 06-DEC-2001;  
Aeomica, Inc. (US)  
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QY 1205 TTTCGAGTACAAATA 1220  
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Db 2 TCTCGAGTACAAATA 17

RESULT 382  
CQ624817

LOCUS CQ624817 17 bp DNA linear PAT 02-FEB-2004  
DEFINITION Sequence 9557 from Patent WO0192524.  
ACCESSION CQ624817  
VERSION CQ624817.1 GI:41675035  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
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AUTHORS Gu, Y., Ji, Y., Penn, S.G., Hanzel, D.K., Rank, D.R., Chen, W. and  
Shannon, M.E.  
TITLE Myosin-like gene expressed in human heart and muscle  
JOURNAL Patent: WO 0192524-A 9557 06-DEC-2001;  
Aeomica, Inc. (US)  
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Db 1 TCTCGAGTACAAATA 16

RESULT 383  
CQ625604

LOCUS CQ625604 17 bp DNA linear PAT 02-FEB-2004  
DEFINITION Sequence 10344 from Patent WO0192524.  
ACCESSION CQ625604  
VERSION CQ625604.1 GI:41675822  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
1  
AUTHORS Gu, Y., Ji, Y., Penn, S.G., Hanzel, D.K., Rank, D.R., Chen, W. and  
Shannon, M.E.  
TITLE Myosin-like gene expressed in human heart and muscle  
JOURNAL Patent: WO 0192524-A 10344 06-DEC-2001;  
Aeomica, Inc. (US)  
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QY 1664 GAAGAAAACCCGGAG 1679  
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Db 2 GAAGAGAGCCCGGAG 17

RESULT 384  
CQ625605

LOCUS CQ625605 17 bp DNA linear PAT 02-FEB-2004  
DEFINITION Sequence 10345 from Patent WO0192524.  
ACCESSION CQ625605  
VERSION CQ625605.1 GI:41675823  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
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AUTHORS Gu, Y., Ji, Y., Penn, S.G., Hanzel, D.K., Rank, D.R., Chen, W. and  
Shannon, M.E.  
TITLE Myosin-like gene expressed in human heart and muscle  
JOURNAL Patent: WO 0192524-A 10345 06-DEC-2001;  
Aeomica, Inc. (US)  
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QY 1664 GAAGAAAACCCGGAG 1679  
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RESULT 385  
I53866/c

LOCUS I53866/c 17 bp DNA linear PAT 07-OCT-1997  
DEFINITION Sequence 1607 from patent US 5646042.  
ACCESSION I53866  
VERSION I53866.1 GI:2475069  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 17)

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AUTHORS Stinchcomb,D.T., Draper,K., McSwiggen,J. and Jarvis,T.
TITLE C-myb targeted ribozymes
JOURNAL Patent: US 5646042-A 1607 08-JUL-1997;
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Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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RESULT 386
LOCUS AR190268 17 bp DNA linear PAT 20-APR-2002
DEFINITION Sequence 5756 from patent US 6346398.
ACCESSION AR190268
VERSION AR190268.1 GI:20236233
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 17)
AUTHORS Pavco,P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.
TITLE Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor
JOURNAL Patent: US 6346398-A 5756 12-FEB-2002;
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Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1878 ACAGCATCACCTCCAG 1893
Db 2 ACAGCATCACCCAG 17

RESULT 387
LOCUS AR325233 17 bp RNA linear PAT 17-AUG-2003
DEFINITION Sequence 2635 from patent US 6566127.
ACCESSION AR325233
VERSION AR325233.1 GI:33711041
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 17)
AUTHORS Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
TITLE Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor
JOURNAL Patent: US 6566127-A 2635 20-MAY-2003;
FEATURES
source
1. .17
/organism="unknown"
/mol_type="unassigned RNA"

Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1878 ACAGCATCACCTCCAG 1893
Db 2 ACAGCATCACCCAG 17

RESULT 387
LOCUS AR325233 17 bp RNA linear PAT 17-AUG-2003
DEFINITION Sequence 2635 from patent US 6566127.
ACCESSION AR325233
VERSION AR325233.1 GI:33711041
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 17)
AUTHORS Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
TITLE Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor
JOURNAL Patent: US 6566127-A 2635 20-MAY-2003;
FEATURES
source
1. .17
/organism="unknown"
/mol_type="unassigned RNA"

Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1878 ACAGCATCACCTCCAG 1893
Db 2 ACAGCATCACCCAG 17

RESULT 387
LOCUS AR327469/c 17 bp RNA linear PAT 17-AUG-2003
DEFINITION Sequence 4871 from patent US 6566127.
ACCESSION AR327469
VERSION AR327469.1 GI:33713277
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 17)
AUTHORS Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
TITLE Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor
JOURNAL Patent: US 6566127-A 4871 20-MAY-2003;
FEATURES
source
1. .17
/organism="unknown"
/mol_type="unassigned RNA"

Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1689 TTCCCTCTAGCGACTG 1704
Db 17 TTCCCTCAGCGACTG 2

RESULT 389
LOCUS AR327470/c 17 bp RNA linear PAT 17-AUG-2003
DEFINITION Sequence 4872 from patent US 6566127.
ACCESSION AR327470
VERSION AR327470.1 GI:33713278
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 17)
AUTHORS Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
TITLE Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor
JOURNAL Patent: US 6566127-A 4872 20-MAY-2003;
FEATURES
source
1. .17
/organism="unknown"
/mol_type="unassigned RNA"

Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1689 TTCCCTCTAGCGACTG 1704
Db 16 TTCCCTCAGCGACTG 1

RESULT 390
LOCUS AR370432 17 bp DNA linear PAT 12-SEP-2003
DEFINITION Sequence 11 from patent US 6300474.
ACCESSION AR370432
VERSION AR370432.1 GI:34607056
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 17)
AUTHORS Pestka,S.
TITLE Modified interferons
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/organism="unknown"
/mol_type="genomic DNA"

Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1550 GCAGACGAGAGAGAG 1565
Db 16 GCAGACGAGAGAGAGG 1

RESULT 396
AR463983
LOCUS AR463983 17 bp DNA linear PAT 20-FEB-2004
DEFINITION Sequence 7660 from patent US 6686188.
ACCESSION AR463983
VERSION AR463983.1 GI:42699040
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 17)
AUTHORS Gu, Y., Ji, Y., Penn, S.G., Hanzel, D.K., Rank, D.R., Chen, W. and Shannon, M.E.
TITLE Polynucleotide encoding a human myosin-like polypeptide expressed predominantly in heart and muscle
JOURNAL Patent: US 6686188-A 7660 03-FEB-2004;
FEATURES Location/Qualifiers
source 1..17
/organism="unknown"
/mol_type="genomic DNA"

Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 355 CGAGACCATGAGGTGG 370
Db 2 CGAACCATGAGTGG 17

RESULT 397
AR463984
LOCUS AR463984 17 bp DNA linear PAT 20-FEB-2004
DEFINITION Sequence 7661 from patent US 6686188.
ACCESSION AR463984
VERSION AR463984.1 GI:42699041
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 17)
AUTHORS Gu, Y., Ji, Y., Penn, S.G., Hanzel, D.K., Rank, D.R., Chen, W. and Shannon, M.E.
TITLE Polynucleotide encoding a human myosin-like polypeptide expressed predominantly in heart and muscle
JOURNAL Patent: US 6686188-A 7661 03-FEB-2004;
FEATURES Location/Qualifiers
source 1..17
/organism="unknown"
/mol_type="genomic DNA"

Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 355 CGAGACCATGAGGTGG 370
Db 2 CGAACCATGAGTGG 17

RESULT 398
AR463985
LOCUS AR463985 17 bp DNA linear PAT 20-FEB-2004
DEFINITION Sequence 7662 from patent US 6686188.
ACCESSION AR463985
VERSION AR463985.1 GI:42699042
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 17)
AUTHORS Gu, Y., Ji, Y., Penn, S.G., Hanzel, D.K., Rank, D.R., Chen, W. and Shannon, M.E.
TITLE Polynucleotide encoding a human myosin-like polypeptide expressed predominantly in heart and muscle
JOURNAL Patent: US 6686188-A 7662 03-FEB-2004;
FEATURES Location/Qualifiers
source 1..17
/organism="unknown"
/mol_type="genomic DNA"

Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 355 CGAGACCATGAGGTGG 370
Db 2 CGAACCATGAGTGG 17

RESULT 399
AR464316
LOCUS AR464316 17 bp DNA linear PAT 20-FEB-2004
DEFINITION Sequence 7993 from patent US 6686188.
ACCESSION AR464316
VERSION AR464316.1 GI:42699373
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 17)
AUTHORS Gu, Y., Ji, Y., Penn, S.G., Hanzel, D.K., Rank, D.R., Chen, W. and Shannon, M.E.
TITLE Polynucleotide encoding a human myosin-like polypeptide expressed predominantly in heart and muscle
JOURNAL Patent: US 6686188-A 7993 03-FEB-2004;
FEATURES Location/Qualifiers
source 1..17
/organism="unknown"
/mol_type="genomic DNA"

Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1536 AACACCGCAAGCAGC 1551
Db 2 AACACCATCAAGCAGC 17

RESULT 399
AR464317
LOCUS AR464317 17 bp DNA linear PAT 20-FEB-2004
DEFINITION Sequence 7994 from patent US 6686188.
ACCESSION AR464317
VERSION AR464317.1 GI:42699374
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 17)
AUTHORS Gu, Y., Ji, Y., Penn, S.G., Hanzel, D.K., Rank, D.R., Chen, W. and Shannon, M.E.
TITLE Polynucleotide encoding a human myosin-like polypeptide expressed predominantly in heart and muscle
JOURNAL Patent: US 6686188-A 7994 03-FEB-2004;
FEATURES Location/Qualifiers
source 1..17
/organism="unknown"
/mol_type="genomic DNA"

Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1536 AACACCGCAAGCAGC 1551
Db 1 AACACCATCAAGCAGC 16

RESULT 400
AR465879
LOCUS AR465879 17 bp DNA linear PAT 20-FEB-2004
DEFINITION Sequence 9556 from patent US 6686188.
ACCESSION AR465879
VERSION AR465879.1 GI:42700936
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 17)
AUTHORS Gu, Y., Ji, Y., Penn, S.G., Hanzel, D.K., Rank, D.R., Chen, W. and Shannon, M.E.
TITLE Polynucleotide encoding a human myosin-like polypeptide expressed
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predominantly in heart and muscle  
Patent: US 6686188-A 9556 03-FEB-2004;  
FEATURES  
source  
1. .17  
/organism="unknown"  
/mol\_type="genomic DNA"

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1205 TTTCAGAGTACAAATA 1220  
Db 2 TCTCGGAGTACAAATA 17

RESULT 401  
AR465880  
LOCUS 17 bp DNA linear PAT 20-FEB-2004  
DEFINITION Sequence 9557 from patent US 6686188.  
ACCESSION AR465880  
VERSION AR465880.1 GI:42700937  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Gu, Y., Ji, Y., Penn, S.G., Hanzel, D.K., Rank, D.R., Chen, W. and Shannon, M.E.  
TITLE Polynucleotide encoding a human myosin-like polypeptide expressed predominantly in heart and muscle  
JOURNAL Patent: US 6686188-A 9557 03-FEB-2004;  
FEATURES Location/Qualifiers  
source 1. .17  
/organism="unknown"  
/mol\_type="genomic DNA"

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1205 TTTCAGAGTACAAATA 1220  
Db 1 TCTCGGAGTACAAATA 16

RESULT 402  
AR466667  
LOCUS 17 bp DNA linear PAT 20-FEB-2004  
DEFINITION Sequence 10344 from patent US 6686188.  
ACCESSION AR466667  
VERSION AR466667.1 GI:42701724  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Gu, Y., Ji, Y., Penn, S.G., Hanzel, D.K., Rank, D.R., Chen, W. and Shannon, M.E.  
TITLE Polynucleotide encoding a human myosin-like polypeptide expressed predominantly in heart and muscle  
JOURNAL Patent: US 6686188-A 10344 03-FEB-2004;  
FEATURES Location/Qualifiers  
source 1. .17  
/organism="unknown"  
/mol\_type="genomic DNA"

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1664 GAAGAAAGACCCGGAG 1679  
Db 1 GAAGAAAGACCCGGAG 16

RESULT 403  
AR466668  
LOCUS 17 bp DNA linear PAT 20-FEB-2004  
DEFINITION Sequence 10345 from patent US 6686188.  
ACCESSION AR466668  
VERSION AR466668.1 GI:42701725  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Gu, Y., Ji, Y., Penn, S.G., Hanzel, D.K., Rank, D.R., Chen, W. and Shannon, M.E.  
TITLE Polynucleotide encoding a human myosin-like polypeptide expressed predominantly in heart and muscle  
JOURNAL Patent: US 6686188-A 10345 03-FEB-2004;  
FEATURES Location/Qualifiers  
source 1. .17  
/organism="unknown"  
/mol\_type="genomic DNA"

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1664 GAAGAAAGACCCGGAG 1679  
Db 1 GAAGAAAGACCCGGAG 16

RESULT 404  
AR482806/c  
LOCUS 17 bp DNA linear PAT 14-MAY-2004  
DEFINITION Sequence 252 from patent US 6703228.  
ACCESSION AR482806  
VERSION AR482806.1 GI:47245329  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Landers, J., Jordan, B., Housman, D.E. and Charest, A.  
TITLE Methods and products related to genotyping and DNA analysis  
JOURNAL Patent: US 6703228-A 252 09-MAR-2004;  
FEATURES Location/Qualifiers  
source 1. .17  
/organism="unknown"  
/mol\_type="genomic DNA"

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 386 TGTCTTTTTCGCATTC 401  
Db 17 TGTCTTTTTCGCATTC 2

RESULT 405  
AX202069/c  
LOCUS 17 bp DNA linear PAT 30-AUG-2001  
DEFINITION Sequence 22 from Patent WO0153525.  
ACCESSION AX202069  
VERSION AX202069.1 GI:15391853  
KEYWORDS  
SOURCE synthetic construct  
ORGANISM synthetic construct  
REFERENCE 1  
AUTHORS Refsath, U.H. and Kolpus, T.G.



QY 1656 AAAAAATAGAGAAAA 1671  
|||||  
Db 1 AAAAAATAGAGAAAA 16

RESULT 410  
AX217167  
LOCUS AX217167 17 bp RNA linear PAT 07-SEP-2001  
DEFINITION Sequence 2609 from Patent WO0159103.  
ACCESSION AX217167  
VERSION AX217167.1 GI:15527228  
KEYWORDS  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.

REFERENCE 1  
AUTHORS Blatt, L., McSwiggen, J. and Chowrira, B.M.  
TITLE Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression  
JOURNAL Patent: WO 0159103-A 2609 16-AUG-2001;  
RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;  
McSwiggen, James (US) ; Chowrira, Bharat M. (US)  
FEATURES  
Location/Qualifiers  
1..17  
/organism="synthetic construct"  
/mol\_type="unassigned RNA"  
/db\_xref="taxon:32630"  
/note="Nucleic Acid"

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1056 CACAAAGTGCTCTT 1071  
|||  
Db 2 CATCAAGTGCTCTT 17

RESULT 411  
AX227740  
LOCUS AX227740 17 bp RNA linear PAT 10-SEP-2001  
DEFINITION Sequence 1112 from Patent WO0157206.  
ACCESSION AX227740  
VERSION AX227740.1 GI:15556881  
KEYWORDS  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.

REFERENCE 1  
AUTHORS Fattaey, A.R., Jarvis, T., McSwiggen, J., Boher, R.N. and Holman, P.S.  
TITLE Method and reagent for the inhibition of checkpoint kinase-1 (chk 1) enzyme  
JOURNAL Patent: WO 0157206-A 1112 09-AUG-2001;  
RIBOZYME PHARMACEUTICALS, INC. (US) ; Fattaey, Ali R. (US)  
FEATURES  
Location/Qualifiers  
1..17  
/organism="synthetic construct"  
/mol\_type="unassigned RNA"  
/db\_xref="taxon:32630"

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1648 CGGGAAGAAAAATAA 1663  
|||||  
Db 2 CTGGAAGAAAAAAA 17

RESULT 412  
AX264407  
LOCUS AX264407 17 bp DNA linear PAT 26-OCT-2001  
DEFINITION Sequence 1798 from Patent WO0173002.

ACCESSION AX264407  
VERSION AX264407.1 GI:16513206  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens

REFERENCE 1  
AUTHORS Kmiec, E.B., Gamper, H.B. and Rice, M.C.  
TITLE Targeted chromosomal genomic alterations with modified single stranded oligonucleotides  
JOURNAL Patent: WO 0173002-A 1798 04-OCT-2001;  
UNIVERSITY OF DELAWARE (US)  
FEATURES  
Location/Qualifiers  
1..17  
/organism="Homo sapiens"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:9606"

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1270 CTCAGCCATAGAAACC 1285  
|||||  
Db 2 CTCAGCCATAGAAACC 17

RESULT 413  
AX264408/c  
LOCUS AX264408 17 bp DNA linear PAT 26-OCT-2001  
DEFINITION Sequence 1799 from Patent WO0173002.  
ACCESSION AX264408  
VERSION AX264408.1 GI:16513207  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens

REFERENCE 1  
AUTHORS Kmiec, E.B., Gamper, H.B. and Rice, M.C.  
TITLE Targeted chromosomal genomic alterations with modified single stranded oligonucleotides  
JOURNAL Patent: WO 0173002-A 1799 04-OCT-2001;  
UNIVERSITY OF DELAWARE (US)  
FEATURES  
Location/Qualifiers  
1..17  
/organism="Homo sapiens"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:9606"

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1270 CTCAGCCATAGAAACC 1285  
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Db 16 CTCAGCCATAGAAACC 1

RESULT 414  
AX272999  
LOCUS AX272999 17 bp RNA linear PAT 29-OCT-2001  
DEFINITION Sequence 568 from Patent WO0162911.  
ACCESSION AX272999  
VERSION AX272999.1 GI:16545736  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens

REFERENCE 1  
AUTHORS Jarvis, T., von Carlowitz, I., McSwiggen, J.A., Hamblin, P.A. and



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Ellis, J.H.
Method and reagent for the inhibition of grid
Patent: WO 0162911-A 568 30-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)
FEATURES
source
1. .17
/organism="Homo sapiens"
/mol_type="unassigned RNA"
/db_xref="taxon:9606"

Query Match
Best Local Similarity 0.6%; Score 12.8; DB 1; Length 17;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1164 TGAATTGCTGCTTCAC 1179
Db 1 TGAAGTGGAGCTTCAC 16

RESULT 415
LOCUS AX326497 17 bp DNA linear PAT 02-SEP-2002
DEFINITION Sequence 2635 from Patent WO0192512.
ACCESSION AX326497
VERSION AX326497.1 GI:18097261
KEYWORDS
SOURCE Zea mays
ORGANISM Zea mays
REFERENCE
AUTHORS Knies, E.B., Gampert, H.B., Rice, M.C. and Kim, J.
TITLE Targeted chromosomal genomic alterations in plants using modified
JOURNAL single stranded oligonucleotides
FEATURES
source
1. .17
/organism="Zea mays"
/mol_type="unassigned DNA"
/db_xref="taxon:4577"

Query Match
Best Local Similarity 0.6%; Score 12.8; DB 1; Length 17;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1130 CGACTGCTAGGCTTC 1145
Db 1 CGAGTCTAGGCGCTC 16

RESULT 416
LOCUS AX326498/c 17 bp DNA linear PAT 02-SEP-2002
DEFINITION Sequence 2636 from Patent WO0192512.
ACCESSION AX326498
VERSION AX326498.1 GI:18097262
KEYWORDS
SOURCE Zea mays
ORGANISM Zea mays
REFERENCE
AUTHORS Knies, E.B., Gampert, H.B., Rice, M.C. and Kim, J.
TITLE Targeted chromosomal genomic alterations in plants using modified
JOURNAL single stranded oligonucleotides
FEATURES
source
1. .17
/organism="Zea mays"
/mol_type="unassigned DNA"
/db_xref="taxon:4577"

Ellis, J.H.
Method and reagent for the inhibition of grid
Patent: WO 0162911-A 568 30-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)
FEATURES
source
1. .17
/organism="Homo sapiens"
/mol_type="unassigned RNA"
/db_xref="taxon:9606"

Query Match
Best Local Similarity 0.6%; Score 12.8; DB 1; Length 17;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1130 CGACTGCTAGGCTTC 1145
Db 1 CGAGTCTAGGCGCTC 2

RESULT 417
LOCUS AX421770/c 17 bp RNA linear PAT 18-JUN-2002
DEFINITION Sequence 106 from Patent WO0188124.
ACCESSION AX421770
VERSION AX421770.1 GI:21525152
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE
AUTHORS Jarvis, T., von Carlowitz, I., Mcswiggen, J.A., McLaughlin, F.G. and
TITLE Method and reagent for the inhibition of erg
JOURNAL Patent: WO 0188124-A 106 22-NOV-2001;
FEATURES RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)
source
1. .17
/organism="Homo sapiens"
/mol_type="unassigned RNA"
/db_xref="taxon:9606"

Query Match
Best Local Similarity 0.6%; Score 12.8; DB 1; Length 17;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 613 CAGTGGAGTGTGTTTGT 628
Db 16 CCGTGGAGAGTTTGT 1

RESULT 418
LOCUS AX422200 17 bp RNA linear PAT 18-JUN-2002
DEFINITION Sequence 536 from Patent WO0188124.
ACCESSION AX422200
VERSION AX422200.1 GI:21525582
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE
AUTHORS Jarvis, T., von Carlowitz, I., Mcswiggen, J.A., McLaughlin, F.G. and
TITLE Method and reagent for the inhibition of erg
JOURNAL Patent: WO 0188124-A 536 22-NOV-2001;
FEATURES RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)
source
1. .17
/organism="Homo sapiens"
/mol_type="unassigned RNA"
/db_xref="taxon:9606"

Query Match
Best Local Similarity 0.6%; Score 12.8; DB 1; Length 17;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1897 GATGGCTGGCATCTT 1912
Db 1897 GATGGCTGGCATCTT 1912

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Db          2  GATGGCTGGCTTACT 17

RESULT 419
AX422364/c
LOCUS      AX422364                17 bp    RNA          linear    PAT 18-JUN-2002
DEFINITION Sequence 700 from Patent WO0188124.
ACCESSION  AX422364
VERSION     AX422364.1  GI:21525746
KEYWORDS   Homo sapiens (human)
SOURCE      Homo sapiens
ORGANISM    Homo sapiens
REFERENCE   1
AUTHORS     Jarvis,T., von Carlowitz,I., Mcswiggen,J.A., McLaughlin,F.G. and
            Randi,A.M.
TITLE       Method and reagent for the inhibition of erg
JOURNAL     Patent: WO 0188124-A 700 22-NOV-2001;
            RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)
FEATURES   source
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            /organism="Homo sapiens"
            /mol_type="unassigned RNA"
            /db_xref="taxon:9606"

REFERENCE   1
AUTHORS     Jarvis,T., von Carlowitz,I., Mcswiggen,J.A., McLaughlin,F.G. and
            Randi,A.M.
TITLE       Method and reagent for the inhibition of erg
JOURNAL     Patent: WO 0188124-A 700 22-NOV-2001;
            RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)
FEATURES   source
            1..17
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Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      613  CAGTGGAGTGTGTTTGT 628
Db      17  CCGTGAGAGTGTGTTGT 2

RESULT 420
AX423248
LOCUS      AX423248                17 bp    RNA          linear    PAT 18-JUN-2002
DEFINITION Sequence 1584 from Patent WO0188124.
ACCESSION  AX423248
VERSION     AX423248.1  GI:21526630
KEYWORDS   Homo sapiens (human)
SOURCE      Homo sapiens
ORGANISM    Homo sapiens
REFERENCE   1
AUTHORS     Jarvis,T., von Carlowitz,I., Mcswiggen,J.A., McLaughlin,F.G. and
            Randi,A.M.
TITLE       Method and reagent for the inhibition of erg
JOURNAL     Patent: WO 0188124-A 1584 22-NOV-2001;
            RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)
FEATURES   source
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Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1890  TCAGCATGATGGGCTG 1905
Db      1     TCAGCAGGATGGCTG 16

RESULT 421
AX423283/c
LOCUS      AX423283                17 bp    RNA          linear    PAT 18-JUN-2002
DEFINITION Sequence 1619 from Patent WO0188124.
ACCESSION  AX423283
VERSION     AX423283.1  GI:21526665
KEYWORDS   Homo sapiens (human)
SOURCE      Homo sapiens
ORGANISM    Homo sapiens
REFERENCE   1
AUTHORS     Zhan,J.
TITLE       Human testis expressed patched like protein
JOURNAL     Patent: EP 1229046-A 135 07-AUG-2002;

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KEYWORDS    Homo sapiens (human)
SOURCE      Homo sapiens
ORGANISM    Homo sapiens
REFERENCE   1
AUTHORS     Jarvis,T., von Carlowitz,I., Mcswiggen,J.A., McLaughlin,F.G. and
            Randi,A.M.
TITLE       Method and reagent for the inhibition of erg
JOURNAL     Patent: WO 0188124-A 1619 22-NOV-2001;
            RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)
FEATURES   Location/Qualifiers
            source
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            /mol_type="unassigned RNA"
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Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      615  GTGGAGTGTGTTTGCA 630
Db      17  GTGGAGAGTGTGTTGTA 2

RESULT 422
AX423458
LOCUS      AX423458                17 bp    RNA          linear    PAT 18-JUN-2002
DEFINITION Sequence 1794 from Patent WO0188124.
ACCESSION  AX423458
VERSION     AX423458.1  GI:21526840
KEYWORDS   Homo sapiens (human)
SOURCE      Homo sapiens
ORGANISM    Homo sapiens
REFERENCE   1
AUTHORS     Jarvis,T., von Carlowitz,I., Mcswiggen,J.A., McLaughlin,F.G. and
            Randi,A.M.
TITLE       Method and reagent for the inhibition of erg
JOURNAL     Patent: WO 0188124-A 1794 22-NOV-2001;
            RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)
FEATURES   Location/Qualifiers
            source
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            /mol_type="unassigned RNA"
            /db_xref="taxon:9606"

Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1897  GATGGGCTGGCATTC 1912
Db      1     GATGGGCTGGCTTACT 16

RESULT 423
AX498828/c
LOCUS      AX498828                17 bp    DNA          linear    PAT 27-SEP-2002
DEFINITION Sequence 135 from Patent EP1229046.
ACCESSION  AX498828
VERSION     AX498828.1  GI:23381110
KEYWORDS   Homo sapiens (human)
SOURCE      Homo sapiens
ORGANISM    Homo sapiens
REFERENCE   1
AUTHORS     Zhan,J.
TITLE       Human testis expressed patched like protein
JOURNAL     Patent: EP 1229046-A 135 07-AUG-2002;

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  Best Local Similarity 0.6%; Score 12.8; DB 1; Length 17;
  Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1136 CTAGGGCTTCTGCACC 1151
Db 17 CTGGGGCTTCTGCTCC 2

RESULT 424
LOCUS AX498830/c 17 bp DNA linear PAT 27-SEP-2002
DEFINITION Sequence 137 from Patent EP1229046.
ACCESSION AX498830
VERSION AX498830.1 GI:23381112
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
  1
AUTHORS Zhan, J.
TITLE Human testis expressed patched like protein
JOURNAL Patent: EP 1229046-A 137 07-AUG-2002;
FEATURES
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      /organism="Homo sapiens"
      /mol_type="unassigned DNA"
      /db_xref="taxon:9606"

Query Match
  Best Local Similarity 0.6%; Score 12.8; DB 1; Length 17;
  Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1135 GCTAGGGCTTCTGCAC 1150
Db 16 GCTTGGGCTTCTGCTC 1

RESULT 425
LOCUS AX527210 17 bp DNA linear PAT 21-NOV-2002
DEFINITION Sequence 240 from Patent WO0226818.
ACCESSION AX527210
VERSION AX527210.1 GI:25171825
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
  1
AUTHORS Gu, Y. and Corrigan, A.
TITLE Human nedd-1
JOURNAL Patent: WO 0226818-A 240 04-APR-2002;
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      /db_xref="taxon:9606"

Query Match
  Best Local Similarity 0.6%; Score 12.8; DB 1; Length 17;
  Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 114 TCACGTGTACAGCCAA 129
Db 2 TCGATGTACAGCCAA 17

RESULT 428
LOCUS AX530806 17 bp DNA linear PAT 22-NOV-2002
DEFINITION Sequence 315 from Patent EP1239051.
ACCESSION AX530806
VERSION AX530806.1 GI:25253407
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QY 270 TCACCAAGTTACGTCCA 285
Db 2 TCACCAAGTTAAGACCA 17

RESULT 426
LOCUS AX527211 17 bp DNA linear PAT 21-NOV-2002
DEFINITION Sequence 241 from Patent WO0226818.
ACCESSION AX527211
VERSION AX527211.1 GI:25171826
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
  1
AUTHORS Gu, Y. and Corrigan, A.
TITLE Human nedd-1
JOURNAL Patent: WO 0226818-A 241 04-APR-2002;
FEATURES
  source
    Aeomica, Inc. (US)
      1..17
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      /mol_type="unassigned DNA"
      /db_xref="taxon:9606"

Query Match
  Best Local Similarity 0.6%; Score 12.8; DB 1; Length 17;
  Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 270 TCACCAAGTTACGTCCA 285
Db 1 TCACCAAGTTAAGACCA 16

RESULT 427
LOCUS AX530805 17 bp DNA linear PAT 22-NOV-2002
DEFINITION Sequence 314 from Patent EP1239051.
ACCESSION AX530805
VERSION AX530805.1 GI:25253405
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
  1
AUTHORS Shannon, M.
TITLE Human posh-like protein 1
JOURNAL Patent: EP 1239051-A 314 11-SEP-2002;
FEATURES
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    Aeomica, Inc. (US)
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Query Match
  Best Local Similarity 0.6%; Score 12.8; DB 1; Length 17;
  Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 114 TCACGTGTACAGCCAA 129
Db 2 TCGATGTACAGCCAA 17

RESULT 428
LOCUS AX530806 17 bp DNA linear PAT 22-NOV-2002
DEFINITION Sequence 315 from Patent EP1239051.
ACCESSION AX530806
VERSION AX530806.1 GI:25253407
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/organism="Homo sapiens"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:9606"

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 892 GGTCGCGCTGTCATCAT 907  
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Db 1 GGTCGCCAGTCATCCT 16

RESULT 431  
AX578993/c  
LOCUS AX578993  
DEFINITION Sequence 831 from Patent WO0211674..  
ACCESSION AX578993  
VERSION AX578993.1 GI:27648195  
KEYWORDS Homo sapiens (human)  
SOURCE  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1  
AUTHORS Thompson,J., Mcswiggen,J., Mckenzie,T., Ayers,D., Szymkowski,D.E.  
and Grupe,A.  
TITLE Method and reagent for the inhibition of calcium activated chloride  
channel-1 (clca-1)  
JOURNAL Patent: WO 0211674-A 831 14-FEB-2002;  
RIBOZYME PHARMACEUTICALS, INC. (US) ; Syntex (U.S.A.) LLC (US) ;  
Thompson, James (US)

FEATURES  
Location/Qualifiers  
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/organism="Homo sapiens"  
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Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 117 CTGTCACAGCCCAATGT 132  
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Db 16 CTGTCAGTCCACTGT 1

RESULT 432  
AX579231  
LOCUS AX579231  
DEFINITION Sequence 1069 from Patent WO0211674..  
ACCESSION AX579231  
VERSION AX579231.1 GI:27648433  
KEYWORDS Homo sapiens (human)  
SOURCE  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1  
AUTHORS Thompson,J., Mcswiggen,J., Mckenzie,T., Ayers,D., Szymkowski,D.E.  
and Grupe,A.  
TITLE Method and reagent for the inhibition of calcium activated chloride  
channel-1 (clca-1)  
JOURNAL Patent: WO 0211674-A 1069 14-FEB-2002;  
RIBOZYME PHARMACEUTICALS, INC. (US) ; Syntex (U.S.A.) LLC (US) ;  
Thompson, James (US)

FEATURES  
Location/Qualifiers  
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Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 114 TCAGTGTTCAGCCAA 129  
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Db 1 TCAGTGTTCAGCCAA 16

RESULT 429  
AX531533  
LOCUS AX531533  
DEFINITION Sequence 1042 from Patent EP1239051.  
ACCESSION AX531533  
VERSION AX531533.1 GI:25254837  
KEYWORDS Homo sapiens (human)  
SOURCE  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1  
AUTHORS Shannon,M.  
TITLE Human posh-like protein 1  
JOURNAL Patent: EP 1239051-A 1042 11-SEP-2002;  
Aeomica, Inc. (US)

FEATURES  
Location/Qualifiers  
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Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 892 GGTCGCGCTGTCATCAT 907  
||||| |||||  
Db 2 GGTCGCCAGTCATCCT 17

RESULT 430  
AX531534  
LOCUS AX531534  
DEFINITION Sequence 1043 from Patent EP1239051.  
ACCESSION AX531534  
VERSION AX531534.1 GI:25254839  
KEYWORDS Homo sapiens (human)  
SOURCE  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1  
AUTHORS Shannon,M.  
TITLE Human posh-like protein 1  
JOURNAL Patent: EP 1239051-A 1043 11-SEP-2002;  
Aeomica, Inc. (US)

FEATURES  
Location/Qualifiers  
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Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 892 GGTCGCGCTGTCATCAT 907  
||||| |||||  
Db 2 GGTCGCCAGTCATCCT 17

RESULT 430  
AX531534  
LOCUS AX531534  
DEFINITION Sequence 1043 from Patent EP1239051.  
ACCESSION AX531534  
VERSION AX531534.1 GI:25254839  
KEYWORDS Homo sapiens (human)  
SOURCE  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1  
AUTHORS Shannon,M.  
TITLE Human posh-like protein 1  
JOURNAL Patent: EP 1239051-A 1043 11-SEP-2002;  
Aeomica, Inc. (US)

FEATURES  
Location/Qualifiers  
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Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 997 GAGTTTCAGCGGAACA 1012  
Db 2 GTGTTTCAGCGGAACA 17

RESULT 433  
AX579671/c  
LOCUS AX579671 17 bp RNA linear PAT 10-JAN-2003  
DEFINITION Sequence 1509 from Patent WO0211674.  
ACCESSION AX579671  
VERSION AX579671.1 GI:27648873  
KEYWORDS Homo sapiens (human)  
SOURCE Homo sapiens  
ORGANISM Homo sapiens  
REFERENCE 1 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.  
AUTHORS Thompson, J., McSwiggen, J., McKenzie, T., Ayers, D., Szymkowski, D.E.  
TITLE Method and reagent for the inhibition of calcium activated chloride  
channel-1 (clca-1)  
JOURNAL Patent: WO 0211674-A 1509 14-FEB-2002;  
RIBOZYME PHARMACEUTICALS, INC. (US); Syntex (U.S.A.) LLC (US);  
Thompson, James (US)  
FEATURES source  
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/organism="Homo sapiens"  
/mol\_type="unassigned RNA"  
/db\_xref="taxon:9606"

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 118 TGTCCAGCGCAATGTT 133  
Db 17 TGTCACTGCCACTGTT 2

RESULT 434  
AX579747  
LOCUS AX579747 17 bp RNA linear PAT 10-JAN-2003  
DEFINITION Sequence 1585 from Patent WO0211674.  
ACCESSION AX579747  
VERSION AX579747.1 GI:27648949  
KEYWORDS Homo sapiens (human)  
SOURCE Homo sapiens  
ORGANISM Homo sapiens  
REFERENCE 1 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.  
AUTHORS Thompson, J., McSwiggen, J., McKenzie, T., Ayers, D., Szymkowski, D.E.  
TITLE Method and reagent for the inhibition of calcium activated chloride  
channel-1 (clca-1)  
JOURNAL Patent: WO 0211674-A 1585 14-FEB-2002;  
RIBOZYME PHARMACEUTICALS, INC. (US); Syntex (U.S.A.) LLC (US);  
Thompson, James (US)  
FEATURES source  
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/db\_xref="taxon:9606"

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 997 GAGTTTCAGCGGAACA 1012

Db 1 GTGTTTCAGCGGAACA 16

RESULT 435  
AX579912/c  
LOCUS AX579912 17 bp RNA linear PAT 10-JAN-2003  
DEFINITION Sequence 1750 from Patent WO0211674.  
ACCESSION AX579912  
VERSION AX579912.1 GI:27649114  
KEYWORDS Homo sapiens (human)  
SOURCE Homo sapiens  
ORGANISM Homo sapiens  
REFERENCE 1 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.  
AUTHORS Thompson, J., McSwiggen, J., McKenzie, T., Ayers, D., Szymkowski, D.E.  
TITLE Method and reagent for the inhibition of calcium activated chloride  
channel-1 (clca-1)  
JOURNAL Patent: WO 0211674-A 1750 14-FEB-2002;  
RIBOZYME PHARMACEUTICALS, INC. (US); Syntex (U.S.A.) LLC (US);  
Thompson, James (US)  
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/mol\_type="unassigned RNA"  
/db\_xref="taxon:9606"

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 335 CTGCTCCATTTCATGA 350  
Db 17 CAGTCCATTTCCTGA 2

RESULT 436  
AX648825  
LOCUS AX648825 17 bp DNA linear PAT 22-MAR-2003  
DEFINITION Sequence 665 from Patent EP1273660.  
ACCESSION AX648825  
VERSION AX648825.1 GI:29151643  
KEYWORDS Homo sapiens (human)  
SOURCE Homo sapiens  
ORGANISM Homo sapiens  
REFERENCE 1 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.  
AUTHORS Gu, Y.  
TITLE Human sodium-hydrogen exchanger like protein 1  
JOURNAL Patent: EP 1273660-A 665 08-JAN-2003;  
Aeomica, Inc. (US)  
FEATURES source  
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/organism="Homo sapiens"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:9606"

Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1003 CAGCGGAACAATGGAG 1018  
Db 2 CAGCTGAAAAATGGAG 17

RESULT 437  
AX648826  
LOCUS AX648826 17 bp DNA linear PAT 22-MAR-2003  
DEFINITION Sequence 666 from Patent EP1273660.

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ACCESSION AX648826
VERSION AX648826.1 GI:29151644
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Gu,Y.
TITLE Human sodium-hydrogen exchanger like protein 1
JOURNAL Patent: EP 1273660-A 666 08-JAN-2003;
Aeomica, Inc. (US)
FEATURES
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1..17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1003 CAGCGGAACAATGGAG 1018
Db 1 CAGCTGAAAAATGGAG 16

RESULT 438
AX674627/c
LOCUS AX674627 17 bp DNA linear PAT 27-MAR-2003
DEFINITION Sequence 3072 from Patent WO03004526.
ACCESSION AX674627
VERSION AX674627.1 GI:29332975
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Telerman,A., Anson,R. and Tuijinder,M.
TITLE Sequences involved in phenomena of tumour suppression, tumour
reversion, apoptosis and/or resistance to viruses and their use as
medicines
JOURNAL Patent: WO 03004526-A 3072 16-JAN-2003;
Molecular Engines Laboratories (FR)
FEATURES
source
1..17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1809 TCAGGAGGAGTAAGTT 1824
Db 17 TCAGGAGGATAGAT 2

RESULT 439
AX693277
LOCUS AX693277 17 bp DNA linear PAT 31-MAR-2003
DEFINITION Sequence 6009 from Patent EP1281758.
ACCESSION AX693277
VERSION AX693277.1 GI:29416241
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Shannon,M., Gu,Y. and Nguyen,C.T.
TITLE Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
mdz12
JOURNAL Patent: EP 1281758-A 6034 05-FEB-2003;
Aeomica, Inc. (US)
FEATURES
source
1..17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

ACCESSION AX648826
VERSION AX648826.1 GI:29151644
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Gu,Y.
TITLE Human sodium-hydrogen exchanger like protein 1
JOURNAL Patent: EP 1273660-A 666 08-JAN-2003;
Aeomica, Inc. (US)
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/organism="Homo sapiens"
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/db_xref="taxon:9606"

Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 564 CTATGTGAGCTGAATG 579
Db 2 CTATGTGTGCAGATG 17

RESULT 440
AX693278
LOCUS AX693278 17 bp DNA linear PAT 31-MAR-2003
DEFINITION Sequence 6010 from Patent EP1281758.
ACCESSION AX693278
VERSION AX693278.1 GI:29416242
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Shannon,M., Gu,Y. and Nguyen,C.T.
TITLE Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
mdz12
JOURNAL Patent: EP 1281758-A 6010 05-FEB-2003;
Aeomica, Inc. (US)
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Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 564 CTATGTGAGCTGAATG 579
Db 1 CTATGTGTGCAGATG 16

RESULT 441
AX693302
LOCUS AX693302 17 bp DNA linear PAT 31-MAR-2003
DEFINITION Sequence 6034 from Patent EP1281758.
ACCESSION AX693302
VERSION AX693302.1 GI:29416266
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Shannon,M., Gu,Y. and Nguyen,C.T.
TITLE Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
mdz12
JOURNAL Patent: EP 1281758-A 6034 05-FEB-2003;
Aeomica, Inc. (US)
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QY 988 CTGTACACAGAGTTTC 1003
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Db 2 CTTTACCAGAGTTCC 17

RESULT 442
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LOCUS AX693303 AX693303 17 bp DNA linear PAT 31-MAR-2003
DEFINITION Sequence 6035 from Patent EP1281758.
ACCESSION AX693303
VERSION AX693303.1 GI:29416267
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
1
AUTHORS Shannon,M., Gu,Y. and Nguyen,C.T.
TITLE Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
JOURNAL mdz12
Patent: EP 1281758-A 6035 05-FEB-2003;
Neomica, Inc. (US)
FEATURES
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Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 988 CTGTACACAGAGTTTC 1003
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Db 1 CTTTACCAGAGTTCC 16

RESULT 443
AX722933/c
LOCUS AX722933 AX722933 17 bp DNA linear PAT 08-MAY-2003
DEFINITION Sequence 620 from Patent WO03025176.
ACCESSION AX722933
VERSION AX722933.1 GI:30423434
KEYWORDS
SOURCE Mus musculus (house mouse)
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE
1
AUTHORS Telerman,A., Anson,R. and Tuijnder,M.
TITLE Sequences involved in phenomena of tumour suppression, tumour
reversion, apoptosis and/or virus resistance and their use as
medicines
JOURNAL Patent: WO 03025176-A 620 27-MAR-2003;
Molecular Engines Laboratories (FR)
FEATURES
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/mol_type="unassigned DNA"
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Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1884 TCACCTCAGCATGAT 1899
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Db 17 TCACCTCAAAATGAT 2

Query Match          0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
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QY 988 CTGTACACAGAGTTTC 1003
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Db 2 CTTTACCAGAGTTCC 17

RESULT 442
AX693303
LOCUS AX693303 AX693303 17 bp DNA linear PAT 31-MAR-2003
DEFINITION Sequence 6035 from Patent EP1281758.
ACCESSION AX693303
VERSION AX693303.1 GI:29416267
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
1
AUTHORS Shannon,M., Gu,Y. and Nguyen,C.T.
TITLE Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
JOURNAL mdz12
Patent: EP 1281758-A 6035 05-FEB-2003;
Neomica, Inc. (US)
FEATURES
source
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/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match          0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 988 CTGTACACAGAGTTTC 1003
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Db 1 CTTTACCAGAGTTCC 16

RESULT 443
AX722933/c
LOCUS AX722933 AX722933 17 bp DNA linear PAT 08-MAY-2003
DEFINITION Sequence 620 from Patent WO03025176.
ACCESSION AX722933
VERSION AX722933.1 GI:30423434
KEYWORDS
SOURCE Mus musculus (house mouse)
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE
1
AUTHORS Telerman,A., Anson,R. and Tuijnder,M.
TITLE Sequences involved in phenomena of tumour suppression, tumour
reversion, apoptosis and/or virus resistance and their use as
medicines
JOURNAL Patent: WO 03025176-A 620 27-MAR-2003;
Molecular Engines Laboratories (FR)
FEATURES
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Query Match          0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1884 TCACCTCAGCATGAT 1899
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Db 17 TCACCTCAAAATGAT 2

Query Match          0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 988 CTGTACACAGAGTTTC 1003
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Db 2 CTTTACCAGAGTTCC 17

RESULT 442
AX723140/c
LOCUS AX723140 AX723140 17 bp DNA linear PAT 08-MAY-2003
DEFINITION Sequence 827 from Patent WO03025176.
ACCESSION AX723140
VERSION AX723140.1 GI:30423641
KEYWORDS
SOURCE Mus musculus (house mouse)
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE
1
AUTHORS Telerman,A., Anson,R. and Tuijnder,M.
TITLE Sequences involved in phenomena of tumour suppression, tumour
reversion, apoptosis and/or virus resistance and their use as
medicines
JOURNAL Patent: WO 03025176-A 827 27-MAR-2003;
Molecular Engines Laboratories (FR)
FEATURES
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/db_xref="taxon:10090"

Query Match          0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 637 CTGTGTTGACTCAGAT 652
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Db 17 CTGTGTTGAATCAGAT 2

RESULT 445
AX726061
LOCUS AX726061 AX726061 17 bp DNA linear PAT 08-MAY-2003
DEFINITION Sequence 3748 from Patent WO03025176.
ACCESSION AX726061
VERSION AX726061.1 GI:30505404
KEYWORDS
SOURCE Mus musculus (house mouse)
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE
1
AUTHORS Telerman,A., Anson,R. and Tuijnder,M.
TITLE Sequences involved in phenomena of tumour suppression, tumour
reversion, apoptosis and/or virus resistance and their use as
medicines
JOURNAL Patent: WO 03025176-A 3748 27-MAR-2003;
Molecular Engines Laboratories (FR)
FEATURES
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Query Match          0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 764 GGTCTGTGCTCCCTGGCT 779
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Db 1 GATCTGTGCTCCCTGGTT 16

RESULT 446
AX727098
LOCUS AX727098 AX727098 17 bp DNA linear PAT 08-MAY-2003
DEFINITION Sequence 4785 from Patent WO03025176.
ACCESSION AX727098
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/db_xref="taxon:9606"

Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1556 GAGAAAGAGGGGAT 1571
Db 17 GAGCAAGAGGAGGAT 2

RESULT 451
AX732306/c
LOCUS AX732306 17 bp DNA linear PAT 08-MAY-2003
DEFINITION Sequence 3940 from Patent WO03025175.
ACCESSION AX732306
VERSION AX732306.1 GI:30511649
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Telerman,A., Anson,R. and Tuijnder,M.
TITLE Sequences involved in phenomena of tumour suppression, tumour
reversion, apoptosis and/or virus resistance and their use as
medicines
JOURNAL Patent: WO 03025175-A 3940 27-MAR-2003;
Molecular Engines Laboratories (FR)
FEATURES
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Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 609 TGGGCGCTGGAGTGTT 624
Db 17 TGGGCGCTGGAGTGAT 2

RESULT 452
AX732811/c
LOCUS AX732811 17 bp DNA linear PAT 08-MAY-2003
DEFINITION Sequence 4445 from Patent WO03025175.
ACCESSION AX732811
VERSION AX732811.1 GI:30512154
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Telerman,A., Anson,R. and Tuijnder,M.
TITLE Sequences involved in phenomena of tumour suppression, tumour
reversion, apoptosis and/or virus resistance and their use as
medicines
JOURNAL Patent: WO 03025175-A 4445 27-MAR-2003;
Molecular Engines Laboratories (FR)
FEATURES
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Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1841 TTTCCTACGCATCAT 1856
Db 17 TTTCCTATGCATGAT 2

RESULT 453
AX732996/c
LOCUS AX732996 17 bp DNA linear PAT 08-MAY-2003
DEFINITION Sequence 4630 from Patent WO03025175.
ACCESSION AX732996
VERSION AX732996.1 GI:30512339
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Telerman,A., Anson,R. and Tuijnder,M.
TITLE Sequences involved in phenomena of tumour suppression, tumour
reversion, apoptosis and/or virus resistance and their use as
medicines
JOURNAL Patent: WO 03025175-A 4630 27-MAR-2003;
Molecular Engines Laboratories (FR)
FEATURES
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/db_xref="taxon:9606"

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Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 284 CAACATGTCAAGGAT 299
Db 17 CCACATGTCAAGGGAT 2

RESULT 454
AX734777/c
LOCUS AX734777 17 bp DNA linear PAT 08-MAY-2003
DEFINITION Sequence 367 from Patent WO03025177.
ACCESSION AX734777
VERSION AX734777.1 GI:30514054
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Telerman,A., Anson,R. and Tuijnder,M.
TITLE Sequences involved in phenomena of tumour suppression, tumour
reversion, apoptosis and/or resistance to viruses and the use
thereof as medicaments
JOURNAL Patent: WO 03025177-A 367 27-MAR-2003;
Molecular Engines Laboratories (FR)
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/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 124 AGCCAATGTTACCGAT 139
Db 17 AGCCAATGTTACTGAT 2
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reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments  
Patent: WO 03025177-A 4163 27-MAR-2003;  
Molecular Engines Laboratories (FR)  
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Query Match  
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Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1809 TCAGGGAGGATAAGTT 1824  
Db 17 TCACGGAGGATAAGAT 2

RESULT 460  
AX744503  
LOCUS  
DEFINITION  
Sequence 468 from Patent WO03031621.  
ACCESSION  
AX744503  
VERSION  
AX744503.1 GI:30723170  
KEYWORDS  
Homo sapiens (human)  
SOURCE  
Homo sapiens  
ORGANISM  
Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE  
1  
AUTHORS  
Zhang, J.  
TITLE  
A human G protein coupled receptor  
JOURNAL  
Patent: WO 03031621-A 468 17-APR-2003;  
Amersham Biosciences (SV) Corp. (US)  
FEATURES  
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Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 900 GTCATCATAGAGAAA 915  
Db 2 GTCGTCATAAGAAA 17

RESULT 461  
AX744504  
LOCUS  
DEFINITION  
Sequence 469 from Patent WO03031621.  
ACCESSION  
AX744504  
VERSION  
AX744504.1 GI:30723171  
KEYWORDS  
Homo sapiens (human)  
SOURCE  
Homo sapiens  
ORGANISM  
Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE  
1  
AUTHORS  
Zhang, J.  
TITLE  
A human G protein coupled receptor  
JOURNAL  
Patent: WO 03031621-A 469 17-APR-2003;  
Amersham Biosciences (SV) Corp. (US)  
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Query Match  
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Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 900 GTCATCATAGAGAAA 915  
Db 1 GTCGTCATAAGAAA 16

RESULT 462  
AX744989  
LOCUS  
DEFINITION  
Sequence 954 from Patent WO03031621.  
ACCESSION  
AX744989  
VERSION  
AX744989.1 GI:30723656  
KEYWORDS  
Homo sapiens (human)  
SOURCE  
Homo sapiens  
ORGANISM  
Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE  
1  
AUTHORS  
Zhang, J.  
TITLE  
A human G protein coupled receptor  
JOURNAL  
Patent: WO 03031621-A 954 17-APR-2003;  
Amersham Biosciences (SV) Corp. (US)  
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/db\_xref="taxon:9606"

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Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1930 TGAATTGGAAGATGC 1945  
Db 2 TGACTTGAAGGATGC 17

RESULT 463  
AX744990  
LOCUS  
DEFINITION  
Sequence 955 from Patent WO03031621.  
ACCESSION  
AX744990  
VERSION  
AX744990.1 GI:30723657  
KEYWORDS  
Homo sapiens (human)  
SOURCE  
Homo sapiens  
ORGANISM  
Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE  
1  
AUTHORS  
Zhang, J.  
TITLE  
A human G protein coupled receptor  
JOURNAL  
Patent: WO 03031621-A 955 17-APR-2003;  
Amersham Biosciences (SV) Corp. (US)  
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/mol\_type="genomic DNA"  
/db\_xref="taxon:9606"

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Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Db 1 TGACTTGAAGGATGC 16

RESULT 464  
AX757558/c  
LOCUS  
AX757558



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        /db_xref="taxon:9606"

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  Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1371 CAGGCTTTTCATCCGAT 1386
Db 17 CAGGCTTTGAGCCGAT 2

RESULT 469
AX761719/c
LOCUS AX761719 17 bp DNA linear PAT 25-JUN-2003
DEFINITION Sequence 5040 from Patent WO03040369.
ACCESSION AX761719
VERSION AX761719.1 GI:32256335
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
1 Teleman,A., Anson,R. and Tuijinder,M.
AUTHORS Sequences involved in tumoral suppression, tumoral reversion,
TITLE apoptosis and/or viral resistance phenomena and their use as
JOURNAL medicines
Patent: WO 03040369-A 5040 15-MAY-2003;
Molecular Engines Laboratories (FR)
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      /mol_type="unassigned DNA"
      /db_xref="taxon:9606"

Query Match
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  Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1804 CAGATTCAGGGAGGAT 1819
Db 17 CAGATTCGGGAGGAT 2

RESULT 470
AX764362
LOCUS AX764362 17 bp DNA linear PAT 25-JUN-2003
DEFINITION Sequence 10 from Patent WO03040296.
ACCESSION AX764362
VERSION AX764362.1 GI:32258667
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE
1 Eulenbergh,K., Steuernagel,A. and Broenner,G.
AUTHORS Men protein, get2, rab-rpl, csp, f-box protein lillina/fbl7, abc50,
TITLE coronin, sec61 alpha, or vhhpal-1, or homologous proteins involved
in the regulation of energy homeostasis
JOURNAL Patent: WO 03040296-A 10 15-MAY-2003;
Develogen Aktiengesellschaft fuer entwicklungsbiologische Forschung
(DB)
FEATURES
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        /note="Mouse Men reverse primer"

Query Match
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  Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1297 CACCTCCAGATGCCGT 1312
Db 2 CCCCTCCACATGCCGT 17

RESULT 471
AX783358/c
LOCUS AX783358 17 bp DNA linear PAT 17-JUL-2003
DEFINITION Sequence 1689 from Patent WO03050284.
ACCESSION AX783358
VERSION AX783358.1 GI:32951207
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
1 Guo,J.
AUTHORS Human prostate cancer candidate protein 1
TITLE Patent: WO 03050284-A 1689 19-JUN-2003;
JOURNAL Amersham Biosciences (SV) Corp. (US)
FEATURES
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  Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 66 TTCGCAAGTCCCTCA 81
Db 17 TTCACAAAGTCCCTGA 2

RESULT 472
AX783359/c
LOCUS AX783359 17 bp DNA linear PAT 17-JUL-2003
DEFINITION Sequence 1690 from Patent WO03050284.
ACCESSION AX783359
VERSION AX783359.1 GI:32951208
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
1 Guo,J.
AUTHORS Human prostate cancer candidate protein 1
TITLE Patent: WO 03050284-A 1690 19-JUN-2003;
JOURNAL Amersham Biosciences (SV) Corp. (US)
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QY 66 TTCGCAAGTCCCTCA 81
Db 16 TTCACAAAGTCCCTGA 1

RESULT 473
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AX783685/c  
LOCUS AX783685 17 bp DNA linear PAT 17-JUL-2003  
DEFINITION Sequence 2016 from Patent WO03050284.  
ACCESSION AX783685  
VERSION AX783685.1 GI:32951534  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
REFERENCE 1  
AUTHORS Guo,J.  
TITLE Human prostate cancer candidate protein 1  
JOURNAL Patent: WO 03050284-A 2016 19-JUN-2003;  
Amersham Biosciences (SV) Corp. (US)  
FEATURES  
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Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 679 GCCATTCTCTGCAC 694  
Db 17 GCCATCTCTTGACC 2  
RESULT 474  
AX783686/c  
LOCUS AX783686 17 bp DNA linear PAT 17-JUL-2003  
DEFINITION Sequence 2017 from Patent WO03050284.  
ACCESSION AX783686  
VERSION AX783686.1 GI:32951535  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
REFERENCE 1  
AUTHORS Guo,J.  
TITLE Human prostate cancer candidate protein 1  
JOURNAL Patent: WO 03050284-A 2017 19-JUN-2003;  
Amersham Biosciences (SV) Corp. (US)  
FEATURES  
source 1..17  
Location/Qualifiers  
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/mol\_type="unassigned DNA"  
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Query Match 0.6%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 679 GCCATTCTCTGCAC 694  
Db 16 GCCATCTCTTGACC 1  
RESULT 475  
AX783827/c  
LOCUS AX783827 17 bp DNA linear PAT 17-JUL-2003  
DEFINITION Sequence 2158 from Patent WO03050284.  
ACCESSION AX783827  
VERSION AX783827.1 GI:32951676  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
REFERENCE 1

Guo,J.  
Human prostate cancer candidate protein 1  
JOURNAL Patent: WO 03050284-A 2158 19-JUN-2003;  
Amersham Biosciences (SV) Corp. (US)  
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Location/Qualifiers  
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QY 209 GAAAAGGGATTAAAG 224  
Db 17 GAAAAGGGAGTCAAG 2  
RESULT 476  
AX783829/c  
LOCUS AX783829 17 bp DNA linear PAT 17-JUL-2003  
DEFINITION Sequence 2160 from Patent WO03050284.  
ACCESSION AX783829  
VERSION AX783829.1 GI:32951678  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
REFERENCE 1  
AUTHORS Guo,J.  
TITLE Human prostate cancer candidate protein 1  
JOURNAL Patent: WO 03050284-A 2160 19-JUN-2003;  
Amersham Biosciences (SV) Corp. (US)  
FEATURES  
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Location/Qualifiers  
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QY 208 TGAAGAAGGGATTAAAG 223  
Db 16 TGAAGAAGGGAGTCAAG 1  
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AX801881  
LOCUS AX801881 17 bp DNA linear PAT 24-NOV-2003  
DEFINITION Sequence 20 from Patent WO03057913.  
ACCESSION AX801881  
VERSION AX801881.1 GI:38500805  
KEYWORDS  
SOURCE Columba palumbus  
ORGANISM Columba palumbus  
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
Archosauria; Aves; Neognathae; Columbiformes; Columbidae; Columba.  
REFERENCE 1  
AUTHORS Mabilat,C., Desvarenne,S., Babola,O., Lacroix,B. and bello Pigem,N.  
TITLE Method for the detection and/or identification of the original  
JOURNAL animal species in animal matter contained in a sample  
Patent: WO 03057913-A 20 17-JUL-2003;  
BIO MERIEUX (FR)  
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QY 1010 ACATGGAGTCGTCCT 1025
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Db 1 ACACGAGTCGTCCT 16

RESULT 478
BD067275/c
LOCUS
DEFINITION
Enzymatic nucleic acid treatment of diseases or conditions related
to levels of epidermal growth factor receptors.
ACCESSION
BD067275
VERSION
BD067275.1 GI:22612878
KEYWORDS
JP 2001511003-A/115.
SOURCE
unidentified
ORGANISM
unclassified.
REFERENCE
1 (bases 1 to 17)
AUTHORS
Akhtar,S., Fell,P. and Mcswiggen,J.A.
TITLE
Enzymatic nucleic acid treatment of diseases or conditions related
to levels of epidermal growth factor receptors
JOURNAL
Patent: JP 2001511003-A.115 07-AUG-2001;
RIBOZYME PHARMACEUTICALS INC,ASTON UNIV
COMMENT
OS Unidentified
PN JP 2001511003-A/115
PD 07-AUG-2001
PF 14-JAN-1998 JP 1998532913
PR 31-JAN-1997 US 60/036476,04-DEC-1997 US 08/985162 PI
SAGHIR AKHTAR,PATRICIA FELL,JAMES A MCSWIGGEN PC
C12N9/00,C07K14/71
CC Topology: Linear;
CC Enzymatic nucleic acid treatment of diseases or conditions CC
related to
CC levels of epidermal growth factor receptors
FH Key Location/Qualifiers
FT source 1..17
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QY 1978 TAAGTCACCTATTCAA 1993
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Db 1 TGAGTCATCTATTCAA 16

RESULT 480
BD097042/c
LOCUS
DEFINITION
Therapeutic agents.
ACCESSION
BD097042
VERSION
BD097042.1 GI:22642630
KEYWORDS
WO 0151480-A/1.
SOURCE
synthetic construct
ORGANISM
other sequences; artificial sequences.
REFERENCE
1 (bases 1 to 17)
AUTHORS
Enoki,T., Yamashita,S., Nishimura,K., Sagawa,H. and Kato,I.
TITLE
Therapeutic agents
JOURNAL
Patent: WO 0151480-A 1 19-JUL-2001;
TAKARA SHUZO CO LTD,TATSUJI ENOKI,SHUSAKU YAMASHITA,KAORI
NISHIMURA, HIROAKI SAGAWA, IKUNOSHIN KATO
COMMENT
OS Artificial Sequence
PN WO 0151480-A/1
PD 19-JUL-2001
PF 11-JAN-2001 WO 2001JP000082
PR 13-JAN-2000 JP 00P 4989,03-OCT-2000 JP 00P 303711 PI
TATSUJI ENOKI,SHUSAKU YAMASHITA,KAORI NISHIMURA,HIROAKI SAGAWA,
IKUNOSHIN KATO
PC C07D309/32,C07D493/08,A61K31/351,A61K31/357,A61P43/00,A61P43/
PC 111,A61P1/16,
PC A61P29/00
CC Designed primer based on nucleotide sequence of human CC
prostaglandin G/H
CC synthase-2 mRNA.
FH Key Location/Qualifiers
FT source 1..17
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FEATURES
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Query Match      0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 992 AACGAGATTCAGCG 1007
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Db      17 AGCCAGAGTTTCACCG 2
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RESULT 481
LOCUS   BD104893
DEFINITION
  Kit and method for determining HLA type.
ACCESSION
  BD104893
VERSION
  BD104893.1 GI:22650467
KEYWORDS
  WO 0192572-A/997.
SOURCE
  synthetic construct
  ORGANISM
    other sequences; artificial sequences.
REFERENCE
  1 (bases 1 to 17)
AUTHORS
  Inoko,H., Kagiya,T., Ichihara,T., Matsumura,Y., Moriya,S. and
  Nishida,M.
TITLE
  Kit and method for determining HLA type
JOURNAL
  Patent: WO 0192572-A 997 06-DEC-2001;
  NISHINO INDUSTRIES INC,SYSTEM RESEARCH INC,HIDETOSHI INOKO, TAEKO
  KAGIYA, TATSUO ICHIHARA,YOSHIYUKI MATSUMURA,SHOGO MORIYA,MICHIO
  NISHIDA
COMMENT
  OS Artificial Sequence
  PN WO 0192572-A/997
  PD 06-DEC-2001
  PF 01-JUN-2001 WO 2001JP004662
  PR 01-JUN-2000 JP 00P 164798
  PI HIDETOSHI INOKO,TAEKO KAGIYA,TATSUO ICHIHARA,YOSHIYUKI PI
  MATSUMURA,
  PI SHOGO MORIYA,MICHIO NISHIDA
  PC C12Q1/68,C12M1/00,C12N15/09,G01N33/53
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QY 1300 CTCACAGATGCCGTTTG 1315
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RESULT 482
LOCUS   BD104895
DEFINITION
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ACCESSION
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VERSION
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KEYWORDS
  WO 0192572-A/999.
SOURCE
  synthetic construct
  ORGANISM
    other sequences; artificial sequences.
REFERENCE
  1 (bases 1 to 17)
AUTHORS
  Inoko,H., Kagiya,T., Ichihara,T., Matsumura,Y., Moriya,S. and
  Nishida,M.
TITLE
  Kit and method for determining HLA type
JOURNAL
  Patent: WO 0192572-A 999 06-DEC-2001;
  NISHINO INDUSTRIES INC,SYSTEM RESEARCH INC,HIDETOSHI INOKO, TAEKO
  KAGIYA, TATSUO ICHIHARA,YOSHIYUKI MATSUMURA,SHOGO MORIYA,MICHIO
  NISHIDA
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  PN WO 0192572-A/999
  PD 06-DEC-2001
  PF 01-JUN-2001 WO 2001JP004662
  PR 01-JUN-2000 JP 00P 164798
  PI HIDETOSHI INOKO,TAEKO KAGIYA,TATSUO ICHIHARA,YOSHIYUKI PI
  MATSUMURA,
  PI SHOGO MORIYA,MICHIO NISHIDA
  PC C12Q1/68,C12M1/00,C12N15/09,G01N33/53
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Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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1 CTCACAGATGATGTTTG 16

RESULT 483
LOCUS   BD105167
DEFINITION
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ACCESSION
  BD105167
VERSION
  BD105167.1 GI:22650741
KEYWORDS
  WO 0192572-A/1271.
SOURCE
  synthetic construct
  ORGANISM
    other sequences; artificial sequences.
REFERENCE
  1 (bases 1 to 17)
AUTHORS
  Inoko,H., Kagiya,T., Ichihara,T., Matsumura,Y., Moriya,S. and
  Nishida,M.
TITLE
  Kit and method for determining HLA type
JOURNAL
  Patent: WO 0192572-A 1271 06-DEC-2001;
  NISHINO INDUSTRIES INC,SYSTEM RESEARCH INC,HIDETOSHI INOKO, TAEKO
  KAGIYA, TATSUO ICHIHARA,YOSHIYUKI MATSUMURA,SHOGO MORIYA,MICHIO
  NISHIDA
COMMENT
  OS Artificial Sequence
  PN WO 0192572-A/1271
  PD 06-DEC-2001
  PF 01-JUN-2001 WO 2001JP004662
  PR 01-JUN-2000 JP 00P 164798
  PI HIDETOSHI INOKO,TAEKO KAGIYA,TATSUO ICHIHARA,YOSHIYUKI PI
  MATSUMURA,
  PI SHOGO MORIYA,MICHIO NISHIDA
  PC C12Q1/68,C12M1/00,C12N15/09,G01N33/53
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Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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1 CTCACAGATGATGTTTG 16

RESULT 484
LOCUS   AB068528
DEFINITION
  Synthetic construct DNA, forward primer for human STS sts-D1S2718
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at lp36.  
ACCESSION AB068528  
VERSION AB068528.1 GI:15129332  
KEYWORDS  
SOURCE  
ORGANISM  
REFERENCE  
AUTHORS  
1  
Chen, Y.Z., Hayashi, Y., Wu, J.G., Takaoka, E., Maekawa, K.,  
Watanabe, N., Inazawa, J., Hosoda, F., Arai, Y., Mizushima, H.,  
Morohashi, A., Ohira, M., Nakagawara, A., Liu, S., Hoshi, M., Horii, A.  
and Soeda, E.  
TITLE A BAC-based STS-content map spanning a 35-Mb region of human  
chromosome 1p35-p36  
JOURNAL Genomics 74 (1), 55-70 (2001)  
MEDLINE 21269192  
PUBMED 11374902  
REFERENCE  
AUTHORS  
2 (bases 1 to 17)  
Horii, A.  
TITLE Direct Submission  
JOURNAL Submitted (04-AUG-2001) Akira Horii, Tohoku University School of  
Medicine, Molecular Pathology; 2-1 Seiryomachi, Aoba-ku, Sendai,  
Miyagi 980-8575, Japan (E-mail: horii@mail.cc.tohoku.ac.jp,  
Tel: 81-22-717-8042, Fax: 81-22-717-8047)  
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B35M20, Human BAC library RPCI-11"  
Query Match 0.6% Score 12.8; DB 1; Length 17;  
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Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 812 GAATTCATGTCCTGG 827  
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Search completed: August 8, 2005, 10:44:52  
Job time : 13 secs



GenCore version 5.1.6

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OM nucleic - nucleic search, using sw model

Run on: August 8, 2005, 10:47:14 ; Search time 10 Seconds

(without alignments)

3.441 Million cell updates/sec

Title: u03040

Perfect score: 2050

Sequence: 1 GGCAGGCTTGTGCTCTCC.....GAACACACGGCGGAATTA 2050

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 0.5

Searched: 433 seqs, 8392 residues

Total number of hits satisfying chosen parameters: 866

Minimum DB seq length: 10

Maximum DB seq length: 50

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 434 summaries

Database : rng03040.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

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1	30.8	1.5	34	1 ABZ23537	Predicted secondar
2	30	1.5	38	1 ADH29885	PRRS PCR primer #2
3	30	1.5	38	1 AAV261173	PRRS ORF4 gene PCR
4	30	1.5	38	1 AAV261123	PRRS ORF4 gene PCR
5	30	1.5	38	1 AAZ58034	Porcine reproducti
6	29.8	1.5	33	1 ADH29891	PRRS PCR primer #2
7	29.8	1.5	33	1 AAV26169	PRRS ORF7 gene PCR
8	29	1.4	37	1 ADH29890	PRRS PCR primer #1
9	29	1.4	37	1 AAV26168	PRRS ORF7 gene PCR
10	29	1.4	37	1 AAV261128	PRRS ORF7 gene PCR
11	27	1.3	27	1 ADL61023	Porcine Reproducti
12	26.6	1.3	34	1 AAZ58047	Porcine reproducti
13	26	1.3	34	1 ADH29887	PRRS PCR primer #2
14	26	1.3	34	1 AAV261125	PRRS ORF5 gene PCR
15	26	1.3	34	1 AAV261175	PRRS ORF5 gene PCR
16	26	1.3	34	1 AAZ58036	Porcine reproducti
17	25.6	1.2	32	1 AAV49309	Primer AB173 for P
18	25	1.2	33	1 ADH29886	PRRS PCR primer #1
19	25	1.2	33	1 AAV261124	PRRS ORF5 gene PCR
20	25	1.2	33	1 AAV261174	PRRS ORF5 gene PCR
21	25	1.2	33	1 AAZ58035	Porcine reproducti
22	24.6	1.2	31	1 AAZ58040	Porcine reproducti
23	23.6	1.2	30	1 ADH29883	PRRS PCR primer #2
24	23.6	1.2	30	1 AAV261121	PRRS ORF3 gene PCR
25	23.6	1.2	30	1 AAV261171	PRRS ORF3 gene PCR
26	23.6	1.2	30	1 ADG14129	Porcine reproducti
27	23.6	1.2	30	1 AAZ58032	Porcine reproducti
28	23.6	1.2	30	1 ADL61032	Porcine Reproducti
29	22.8	1.1	26	1 AAZ27843	North American PRR
30	22.8	1.1	28	1 AAQ63586	ISU-12 ORF 5 prime
31	22.8	1.1	28	1 AAT14399	PRRSV VR 2385 ORF-
32	22.6	1.1	30	1 AAV99417	Primer PRRSV5 used
33	22	1.1	22	1 AAQ63573	PCR primer PP284.

PCR primer PP285.  
 PRRSV VR 2385 prim  
 PRRSV VR 2385 prim  
 Primer PP284 for O  
 Primer PP285 for O  
 Porcine reproducti  
 Porcine reproducti  
 North American PRR  
 PRRSV isolate Cana  
 Porcine Lelystad v  
 Attenuated PRRS v  
 Porcine reproducti  
 PRRSV RNA PCR prim  
 Porcine CD 151 RT-  
 PCR primer PP288.  
 PCR primer PP287.  
 PCR primer PP289.  
 PCR primer PP386.  
 PCR primer PP286.  
 PRRSV VR 2385 prim  
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 Primer PP286 for O  
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 Porcine CD 151 RT-  
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 Primer for PRRSV O  
 ISU-12 ORF 6 prime  
 PRRSV VR 2385 ORF-  
 Porcine reproducti  
 PRRSV RNA PCR prim  
 Porcine CD 151 RT-  
 Porcine reproducti  
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 Primer XM780 for O  
 Primer XM1023 for O  
 Primer DP586 for O  
 Porcine reproducti  
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 Porcine reproducti  
 Human apolipoprote  
 Human apolipoprote  
 Human apolipoprote  
 PRRSV ORF 2 PCR pr  
 North American PRR  
 ISU-12 ORF 7 prime  
 PRRSV VR 2385 ORF-  
 Human chromosome 1  
 Porcine reproducti  
 M. hyorhinis targe  
 Porcine reproducti  
 Porcine reproducti  
 Human CUC1 Gene e  
 Human chromosome 1  
 Cardiac alpha-MHC

107	16.4	0.8	20	1	AA06739	Human JAGGED1 gene	c 180	15	0.7	19	1	AAT14403	PRRSV VR 2385 ORF-
108	16.2	0.8	21	1	AA089224	Opioind receptor PC	c 181	15	0.7	19	1	ADG14133	Porcine reproducti
109	16.2	0.8	21	1	AA082198	Chromosome 11 (loc	c 182	15	0.7	19	1	ADR76521	Human apolipoprote
110	16.2	0.8	21	1	AA075777	Reverse transcript	c 183	15	0.7	19	1	ADR79465	Human apolipoprote
111	16.2	0.8	21	1	AA059501	PCR primer for rat	c 184	15	0.7	20	1	ADI15600	Human phosphodiester
112	16.2	0.8	21	1	AA024250	Complementary nucl	c 185	14.8	0.7	18	1	AAT89137	Lutetium texaphyri
113	16.2	0.8	21	1	AA041408	His tag DNA. Synt	c 186	14.8	0.7	18	1	ACF63212	Human p53 PCR prim
114	16.2	0.8	21	1	ABX79194	EST polymorphic DN	c 187	14.8	0.7	18	1	ADB54710	Hybridisation olig
115	16.2	0.8	21	1	ADH94423	Human gene PCR pri	c 188	14.8	0.7	18	1	ADP83491	Human MC1R sequenc
116	16.2	0.8	21	1	ADQ92770	Androgen receptor	c 189	14.8	0.7	18	1	ADM80162	Hexalysine encodin
117	16.2	0.8	21	1	ADQ92772	Androgen receptor	c 190	14.8	0.7	19	1	AAV58063	Humanised variable
118	16	0.8	16	1	AAT14404	PRRSV sequencing p	c 191	14.8	0.7	19	1	AAV81132	Chimeric 708 Vh co
119	16	0.8	17	1	ABK56212	Human CLCA1 gene e	c 192	14.8	0.7	19	1	AAV811082	Vaccine 1 708 Vh c
120	16	0.8	17	1	ABK57509	Human CLCA1 gene e	c 193	14.8	0.7	19	1	AAZ70215	Human biallelic ma
121	16	0.8	20	1	AA098829	Human biallelic po	c 194	14.8	0.7	19	1	AAZ71810	Human biallelic ma
122	15.8	0.8	19	1	AA032254	Streptomyces sp. c	c 195	14.8	0.7	19	1	AAZ69808	Human biallelic ma
123	15.8	0.8	19	1	AD157146	Oryza minuta Pig 1	c 196	14.8	0.7	19	1	ADE27581	Stearoyl-CoA desat
124	15.8	0.8	20	1	AA020226	PCR primer used to	c 197	14.8	0.7	19	1	ADE27291	Stearoyl-CoA desat
125	15.8	0.8	20	1	AA0203935	PCR primer used to	c 198	14.8	0.7	19	1	ADE30009	Mitogen activated
126	15.8	0.8	20	1	AA063047	Human IL-1B gene o	c 199	14.8	0.7	19	1	ADE29930	Mitogen activated
127	15.8	0.8	20	1	ABK67699	Oligonucleotide #1	c 200	14.8	0.7	19	1	ADP92073	Human cytokeatin
128	15.8	0.8	20	1	ABK89086	Mutant PCR primer,	c 201	14.8	0.7	19	1	ADI00848	PCR primer SEQ 18
129	15.8	0.8	20	1	AB224228	Human LAMAN cDNA s	c 202	14.8	0.7	19	1	AQ062378	Anti-CLSPN siRNA S
130	15.8	0.8	21	1	AA063587	ISU-12 ORF 6 prime	c 203	14.8	0.7	19	1	ADM74139	Common primer B fo
131	15.8	0.8	21	1	AAT14400	PRRSV VR 2385 ORF-	c 204	14.6	0.7	19	1	ADM16445	RNA intron poly-Py
132	15.8	0.8	21	1	ADG14130	Porcine reproducti	c 205	14.4	0.7	16	1	AAQ20606	Tyrosinase initiat
133	15.8	0.8	21	1	ADP75382	Human RT-PCR prime	c 206	14.4	0.7	16	1	AAZ54609	Intercellular adhe
134	15.8	0.8	21	1	ADR18493	Human GOBLIN siRNA	c 207	14.4	0.7	16	1	AA340456	Human adenosine re
135	15.4	0.8	17	1	ABK56211	Human CLCA1 gene e	c 208	14.4	0.7	16	1	AAZ20178	Human ICAM-1 polyn
136	15.4	0.8	17	1	ABK260124	Human K-Rae DNazym	c 209	14.4	0.7	16	1	AA556860	Validation ribozym
137	15.4	0.8	18	1	AA2986670	PCR primer #2 for	c 210	14.4	0.7	16	1	ABZ58625	Cytochrome P450 (C
138	15.4	0.8	18	1	AA2986646	PCR primer #2 used	c 211	14.4	0.7	16	1	ABZ59872	Human ICAM-1 antis
139	15.4	0.8	19	1	ADN34538	siNA upper strand	c 212	14.4	0.7	16	1	ABD19138	Human ICAM-1 DNA f
140	15.4	0.8	19	1	ADN34796	siNA lower strand	c 213	14.4	0.7	17	1	AAZ68724	Human flt1 VEGF re
141	15.4	0.8	19	1	ADR81348	Hepatitis C virus	c 214	14.4	0.7	17	1	AAZ01213	PCR primer for PGI
142	15.4	0.8	20	1	AA927278	PCR primer used to	c 215	14.4	0.7	17	1	AAK36194	Human Genomic SNP
143	15.4	0.8	20	1	AA975595	Murine SAC1 gene-s	c 216	14.4	0.7	17	1	ABK55650	Human CLCA1 gene e
144	15.4	0.8	20	1	AD136613	Human PLML DNA, an	c 217	14.4	0.7	17	1	ACN08125	WNV minus strand H
145	15.4	0.8	20	1	AD136680	Human PLML DNA tar	c 218	14.4	0.7	17	1	ACN06714	WNV Amberyyme subs
146	15.4	0.8	20	1	ADM15935	Murine SAC1 DNA PC	c 219	14.4	0.7	17	1	ACN08124	WNV minus strand H
147	15.2	0.7	20	1	AAQ74655	Aspergillus aculea	c 220	14.4	0.7	17	1	ABZ64908	Human HER2 DNazyme
148	15.2	0.7	20	1	AAQ75601	Reverse transcript	c 221	14.4	0.7	17	1	ABZ64908	Plant growth assoc
149	15.2	0.7	20	1	AAT15101	B-actin (60-79) Rr	c 222	14.4	0.7	17	1	ADH79315	Ring-necked pheasa
150	15.2	0.7	20	1	AAT09002	3' primer for gdh	c 223	14.4	0.7	17	1	ADK13236	Human glioma endot
151	15.2	0.7	20	1	AA044544	Primer for agammag	c 224	14.4	0.7	18	1	AAV02505	Transcriptional ac
152	15.2	0.7	20	1	AAT17996	Brevibacterium lac	c 225	14.4	0.7	18	1	AA241159	Human G-alpha-11 p
153	15.2	0.7	20	1	AA047265	5' fragment #2 of	c 226	14.4	0.7	18	1	AAZ19530	Human G-alpha-11 p
154	15.2	0.7	20	1	AAV07500	Lelystad virus pri	c 227	14.4	0.7	18	1	ABR82097	Zmaxi gene region
155	15.2	0.7	20	1	AA240165	PCR primer for hum	c 228	14.4	0.7	18	1	ABK22894	Human Zmaxi cDNA r
156	15.2	0.7	20	1	AAH19558	Human beta-actin p	c 229	14.4	0.7	18	1	ACC45477	Human HBM STS mark
157	15.2	0.7	20	1	AA062997	Mouse PEPCK-cytoso	c 230	14.4	0.7	18	1	ADB98175	Sequence tagged si
158	15.2	0.7	20	1	ABK24602	E1F2AK3 gene seque	c 231	14.4	0.7	18	1	ADR17040	Human chromosome 1
159	15.2	0.7	20	1	AB195304	Capture oligonucle	c 232	14.4	0.7	18	1	ADR47691	Human chromosome 1
160	15.2	0.7	20	1	AB197348	Capture oligonucle	c 233	14.4	0.7	19	1	AAT90345	Epithelial protein
161	15.2	0.7	20	1	ABQ81004	Fibroblast Growth	c 234	14.4	0.7	19	1	AAV07132	Nucleotide sequenc
162	15.2	0.7	20	1	ABK292279	Human oligonucleot	c 235	14.4	0.7	19	1	AAV40938	Primer BCRI:133801
163	15.2	0.7	20	1	ABD28509	R33851-derived oli	c 236	14.4	0.7	19	1	AAZ72391	Human biallelic ma
164	15.2	0.7	20	1	ADH10296	Nucleotide sequenc	c 237	14.4	0.7	19	1	AAZ30312	Human PKD1 gene mu
165	15.2	0.7	20	1	ADH64784	Human glucocortic	c 238	14.4	0.7	19	1	ACC59202	Human hnRNP A2/B1
166	15.2	0.7	20	1	ADH64014	Human glucocortic	c 239	14.4	0.7	19	1	ADF35725	Human VEGFR1 short
167	15.2	0.7	20	1	ADJ53522	Human PPP3CB DNA a	c 240	14.4	0.7	19	1	ADF36152	Human VEGFR1 short
168	15.2	0.7	20	1	ADJ53590	Human PPP3CB DNA a	c 241	14.4	0.7	19	1	ADF71257	Protein tyrosine p
169	15.2	0.7	20	1	ADJ17332	Antisense DNA olig	c 242	14.4	0.7	19	1	ADF71331	Human apolipoprote
170	15.2	0.7	20	1	ADJ17509	Antisense DNA olig	c 243	14.4	0.7	19	1	ADR78172	Human apolipoprote
171	15.2	0.7	20	1	ADM15993	Antisense DNA olig	c 244	14.4	0.7	19	1	ADR75932	Human apolipoprote
172	15.2	0.7	20	1	ADM13649	Latent TGF-beta b1	c 245	14.4	0.7	19	1	ADR78998	Human apolipoprote
173	15.2	0.7	20	1	ADJ26942	Lactobacillus helv	c 246	14.4	0.7	19	1	ADR78999	Human apolipoprote
174	15.2	0.7	20	1	ADJ054679	Farnesoid X recept	c 247	14.4	0.7	19	1	ADR75554	Human apolipoprote
175	15.2	0.7	20	1	ADK20853	Acyl-coenzyme A sy	c 248	14.4	0.7	19	1	ADR76380	Human apolipoprote
176	15.2	0.7	20	1	ADK22867	Acyl-coenzyme A sy	c 249	14.4	0.7	19	1	ADR76381	Human apolipoprote
177	15.2	0.7	20	1	ADK21644	Acyl-coenzyme A sy	c 250	14.4	0.7	19	1	ADR78550	Human apolipoprote
178	15	0.7	15	1	ADG14108	Porcine reproducti	c 251	14	0.7	14	1	ADG14097	Porcine reproducti
179	15	0.7	19	1	AAQ63590	ISU-12 ORF 7 prime	c 252	14	0.7	14	1	ADG14100	Porcine reproducti

253	14	0.7	14	1	ADG14103	Porcine reproducti	c 326	13.8	0.7	17	1	ADM44431	Mutant cell identi
254	14	0.7	14	1	ADG14106	Porcine reproducti	327	13.8	0.7	17	1	ADM44430	Mutant cell identi
255	14	0.7	17	1	AAV93386	Human B-raf substr	c 328	13.8	0.7	17	1	AD166866	Triple helix formi
256	14	0.7	17	1	ABA78478	CDKN2A mutation co	329	13.8	0.7	18	1	ADR75087	Allele specific pr
257	14	0.7	17	1	ABA78481	CDKN2A mutation co	330	13.8	0.7	18	1	AAQ51818	mdr-1 mRNA ribozym
258	14	0.7	17	1	ABA78482	CDKN2A mutation co	c 331	13.8	0.7	18	1	AAQ73611	Dactylis glomerata
259	14	0.7	17	1	ABA78477	CDKN2A mutation co	c 332	13.8	0.7	18	1	AAQ84677	PCR primer for HSV
260	14	0.7	17	1	ABK56213	Human CICAI gene e	c 333	13.8	0.7	18	1	AAQ94951	PCR primer RB 8.
261	14	0.7	17	1	ACN07103	WNV Amberszyme subs	c 334	13.8	0.7	18	1	AAV30615	Telomerase reverse
262	14	0.7	17	1	ACN14337	WNV minus strand A	c 335	13.8	0.7	18	1	AAV49735	Plamid pGHi oligo
263	14	0.7	17	1	ACN10439	WNV minus strand I	c 336	13.8	0.7	18	1	AAV81059	De-immunised 708 V
264	14	0.7	17	1	ACN05352	WNV minus strand D	337	13.8	0.7	18	1	AAV21563	Human biallelic ma
265	14	0.7	17	1	ACN13691	WNV minus strand H	338	13.8	0.7	18	1	AAZ73867	Human biallelic ma
266	14	0.7	17	1	ACN08123	WNV minus strand H	339	13.8	0.7	18	1	AAA26971	Bacillus thuringie
267	14	0.7	17	1	ACN07694	WNV minus strand H	340	13.8	0.7	18	1	AAZ73473	Forward primer #10
268	14	0.7	17	1	ACN01234	WNV Hammerhead Rib	c 341	13.8	0.7	18	1	AAZ79630	Human Akt-3 antisense
269	14	0.7	17	1	AD56453	2'-F-ANA antisense	c 342	13.8	0.7	18	1	AAZ24800	Bacillus thuringie
270	14	0.7	17	1	AD56443	CAT antisense olig	c 343	13.8	0.7	18	1	ABK89490	PCR primer #10, u
271	14	0.7	17	1	ADP46090	Extend primer 62 u	c 344	13.8	0.7	18	1	ACF62970	Human p16 PCR prim
272	14	0.7	18	1	AAT50604	Human CTRP hairpin	345	13.8	0.7	18	1	ACF62972	Human p16 PCR prim
273	14	0.7	18	1	AAT92041	Sense primer deriv	346	13.8	0.7	18	1	ACF57207	Human LAMA3 forwar
274	14	0.7	18	1	AAT92017	Capture probe deri	c 347	13.8	0.7	18	1	ADH69044	Hepatitis C virus
275	14	0.7	18	1	AAT68368	Locis-specific prim	c 348	13.8	0.7	18	1	ABV75973	Mouse insulin gene
276	14	0.7	18	1	AAK01506	Primer SIS sy262 r	c 349	13.8	0.7	18	1	ADH70522	Human Vbeta gene r
277	14	0.7	18	1	AAZ92565	Human Y-specific S	c 350	13.8	0.7	18	1	ADM79168	Human delta crypta
278	14	0.7	18	1	ADR75087	Allele specific pr	c 351	13.8	0.7	18	1	ADO26678	Synthetic leader s
279	13.8	0.7	17	1	AAT99136	Lutetium texaphyri	c 352	13.8	0.7	18	1	ADO26686	Synthetic leader s
280	13.8	0.7	17	1	AAK68969	Human flt1 VEGF re	353	13.8	0.7	18	1	ADO26680	Synthetic leader s
281	13.8	0.7	17	1	AAK36445	Human genomic SNP	354	13.8	0.7	18	1	ADO26646	Synthetic leader s
282	13.8	0.7	17	1	AAA36383	Human genomic SNP	355	13.8	0.7	18	1	ADS90612	Oligonucleotide of
283	13.8	0.7	17	1	AAA36403	Human genomic SNP	c 356	13.8	0.7	18	1	ADS90886	Oligonucleotide of
284	13.8	0.7	17	1	AAA25180	Oestrogen receptor	357	13.4	0.7	15	1	AAT56997	RSV IC hammerhead
285	13.8	0.7	17	1	ABK01801	Human NOGO Zinzyme	c 358	13.4	0.7	15	1	AAV32751	GST-pi mRNA antisense
286	13.8	0.7	17	1	ABK03731	Human CD20 Amberzy	c 359	13.4	0.7	15	1	AAV54319	Inducible nitric o
287	13.8	0.7	17	1	AAI68655	ICAM-1 triple heli	c 360	13.4	0.7	15	1	AAA33763	Low adenosine anti
288	13.8	0.7	17	1	AAK57339	Stress tolerance c	c 361	13.4	0.7	15	1	AAZ97937	HIV-1 protease gen
289	13.8	0.7	17	1	ABK25740	Stress tolerance c	c 362	13.4	0.7	15	1	AAZ97937	HIV-1 protease gen
290	13.8	0.7	17	1	ABV78890	Human HTPPL scannin	c 363	13.4	0.7	15	1	AAH2162	Rhodococcus specif
291	13.8	0.7	17	1	ABK19168	Human ERG Amberszym	c 364	13.4	0.7	15	1	AAH21849	Rhodococcus nitril
292	13.8	0.7	17	1	ABK17937	Human ERG hammerhe	c 365	13.4	0.7	15	1	ABZ95579	Human inducible ni
293	13.8	0.7	17	1	ABK19167	Human ERG Amberszym	c 366	13.4	0.7	15	1	ABD19738	Human inducible ni
294	13.8	0.7	17	1	ACN07767	WNV minus strand H	c 367	13.4	0.7	16	1	AAT32675	Effective anti-HIV
295	13.8	0.7	17	1	ACN10501	WNV minus strand I	c 368	13.4	0.7	16	1	AAT91205	Haiprin ribozyme r
296	13.8	0.7	17	1	ACN05335	WNV DNazyme substr	c 369	13.4	0.7	16	1	AAH69972	Human survivin gen
297	13.8	0.7	17	1	ACN00957	WNV Hammerhead Rib	370	13.4	0.7	17	1	AAK69334	Human flt1 VEGF re
298	13.8	0.7	17	1	ACN03929	WNV Zinzyme substr	371	13.4	0.7	17	1	AAV97695	Human EGF-R target
299	13.8	0.7	17	1	ACN13114	WNV minus strand Z	c 372	13.4	0.7	17	1	AAA23085	Integrin subunit b
300	13.8	0.7	17	1	ABZ61990	Human H-Ras DNazym	c 373	13.4	0.7	17	1	AAA23086	Integrin subunit b
301	13.8	0.7	17	1	ACD57068	HCV DNazyme substr	374	13.4	0.7	17	1	AAA20594	Integrin alpha 6 s
302	13.8	0.7	17	1	ACD57139	HCV DNazyme substr	375	13.4	0.7	17	1	AAV93573	Human B-raf substr
303	13.8	0.7	17	1	ACC62853	Murine oligonucleo	376	13.4	0.7	17	1	AAV93574	Human B-raf substr
304	13.8	0.7	17	1	ACC63485	Murine oligonucleo	377	13.4	0.7	17	1	AAZ97938	HIV-1 protease gen
305	13.8	0.7	17	1	ADB39944	Tumour suppression	c 378	13.4	0.7	17	1	AAZ97938	Hammerhead ribozym
306	13.8	0.7	17	1	ADB44598	Tumour suppression	379	13.4	0.7	17	1	AAH95339	Human Chk1 ribozym
307	13.8	0.7	17	1	ADF64255	Human PCPI DNA fr	380	13.4	0.7	17	1	AAH95705	Human Chk1 ribozym
308	13.8	0.7	17	1	ADI49238	Human tumour suppr	381	13.4	0.7	17	1	AAH95958	Human Chk1 ribozym
309	13.8	0.7	17	1	ADI47809	Human tumour suppr	382	13.4	0.7	17	1	ABK00226	Human NOGO Hammerh
310	13.8	0.7	17	1	ADH79302	Little tumny probe	c 383	13.4	0.7	17	1	ABK01551	Human NOGO G-Cleav
311	13.8	0.7	17	1	ACC51806	Human tumour suppr	c 384	13.4	0.7	17	1	ABK00571	Human NOGO Hammerh
312	13.8	0.7	17	1	ADL47161	Human NOGO recepto	385	13.4	0.7	17	1	ABK00227	Human NOGO Hammerh
313	13.8	0.7	17	1	ADL50164	Human PKR substrat	c 386	13.4	0.7	17	1	ABK01444	Human NOGO Inozyme
314	13.8	0.7	17	1	ADL50176	Human PKR substrat	c 387	13.4	0.7	17	1	ABK01099	Human NOGO Inozyme
315	13.8	0.7	17	1	ADI66861	Triple helix formi	c 388	13.4	0.7	17	1	ABK01428	Human GMPLP-1 17-m
316	13.8	0.7	17	1	ADI66858	Triple helix formi	c 389	13.4	0.7	17	1	ABN10109	Human GMPLP-1 17-m
317	13.8	0.7	17	1	ADI66860	Triple helix formi	c 390	13.4	0.7	17	1	ABN10107	Human GMPLP-1 17-m
318	13.8	0.7	17	1	ADI66859	Triple helix formi	c 391	13.4	0.7	17	1	ABN10108	Human GMPLP-1 17-m
319	13.8	0.7	17	1	ADI66864	Triple helix formi	392	13.4	0.7	17	1	ABK18560	Human ERG G-cleave
320	13.8	0.7	17	1	ADI66867	Triple helix formi	c 393	13.4	0.7	17	1	ABK18559	Human PAPP-Ea asso
321	13.8	0.7	17	1	ADI66862	Triple helix formi	394	13.4	0.7	17	1	ABK18559	Human PAPP-Ea asso
322	13.8	0.7	17	1	ADI66865	Triple helix formi	395	13.4	0.7	17	1	ABK18559	Human PAPP-Ea asso
323	13.8	0.7	17	1	ADI66857	Triple helix formi	396	13.4	0.7	17	1	ABK18559	Human PAPP-Ea asso
324	13.8	0.7	17	1	ADI82912	HCV DNazyme substr	397	13.4	0.7	17	1	ABK18559	Human PAPP-Ea asso
325	13.8	0.7	17	1	ADI82927	HCV DNazyme substr	398	13.4	0.7	17	1	ABK18559	Human PAPP-Ea asso
							399	13.4	0.7	17	1	ABV89604	Human POSH11 scann

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399 13.4 0.7 17 1 ABV89606 Human POSHL1 scann
400 13.4 0.7 17 1 ACN09264 WNV minus strand H
c 401 13.4 0.7 17 1 ACN06554 WNV Amberyne subs
402 13.4 0.7 17 1 ACN10683 WNV minus strand I
c 403 13.4 0.7 17 1 ACN04807 WNV DNzyme substr
c 404 13.4 0.7 17 1 ACN05659 WNV Amberyne subs
c 405 13.4 0.7 17 1 ACN00847 WNV Hammerhead Rib
c 406 13.4 0.7 17 1 ACN10440 WNV minus strand I
c 407 13.4 0.7 17 1 ACN05173 WNV DNzyme substr
c 408 13.4 0.7 17 1 ACN13461 WNV minus strand Z
c 409 13.4 0.7 17 1 ACN08287 WNV minus strand H
c 410 13.4 0.7 17 1 ACDS3856 HBV zinzyme substr
c 411 13.4 0.7 17 1 ACDS5586 HBV amberyne subs
c 412 13.4 0.7 17 1 ACDS0943 HBV hammerhead rib
c 413 13.4 0.7 17 1 ACC63487 Murine oligonucleo
c 414 13.4 0.7 17 1 ACC64485 Murine oligonucleo
c 415 13.4 0.7 17 1 ACC64906 Murine oligonucleo
c 416 13.4 0.7 17 1 ACC66189 Murine oligonucleo
c 417 13.4 0.7 17 1 ADF63617 Human PCCPI DNA fr
c 418 13.4 0.7 17 1 ADI48885 Human tumour suppr
c 419 13.4 0.7 17 1 ADI50511 Human tumour suppr
c 420 13.4 0.7 17 1 ADI48798 Human tumour suppr
c 421 13.4 0.7 17 1 ACS22709 Human tumour suppr
c 422 13.4 0.7 17 1 ADI48321 Human IKK-gamma su
c 423 13.4 0.7 17 1 ADI48705 Human PKR substat
c 424 13.4 0.7 17 1 ADI51038 Human PTGDR substat
c 425 13.4 0.7 17 1 ADI49813 Human PTGDR substat
c 426 13.4 0.7 17 1 ADI51037 Human PTGDR substat
c 427 13.4 0.7 17 1 ADI51434 Human glioma endot
c 428 13.4 0.7 17 1 ADK13140 Hepatitis B virus
c 429 13.4 0.7 17 1 ADM59598 Hepatitis B virus
c 430 13.4 0.7 17 1 ADM60194 Hepatitis B virus
c 431 13.4 0.7 17 1 ADM58206 Hepatitis B virus
c 432 13.4 0.7 17 1 ACN73158 Human GDMLP-1 prob
c 433 13.4 0.7 17 1 ACN73159 Human GDMLP-1 prob
c 434 13.4 0.7 17 1 ACN73197 Human GDMLP-1 prob
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## ALIGNMENTS

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RESULT 1
ID ABZ23537
XX
AC ABZ23537;
XX
DT 07-APR-2003 (first entry)
XX
DE Predicted secondary structure of ORF7 fragment of PRRSV Lelystad isolate.
XX
KW Open reading frame 7; ORF7; Lelystad isolate; PRRSV; RNA replication;
KW Arterivirus; vaccine; pig; ss.
XX
OS Porcine reproductive and respiratory syndrome virus.
XX
EH Key Location/Qualifiers
FT stem_loop 2..8
FT /*tag= a
FT /*note= "these bases bind to bases 21-27"
FT 21..27
FT /*tag= b
FT /*note= "these bases bind to bases 2-8"
XX
XX WO200295040-A1.
XX
XX 28-NOV-2002.
XX
XX 16-MAY-2002; 2002WO-NL000314.
XX
XX 21-MAY-2001; 2001EP-00201921.
XX
PA (IDLE-) ID-LELYSTAD INST DIERHOUDERIJ EN DIERGEZ.
```

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XX Verheije MH;
PI WPI; 2003-129432/12.
XX
DR Arterivirus replicon for obtaining a vaccine useful against porcine
XX of its original arteriviral nucleic acids encoding open reading frame-7.
XX
XX Example 1; Fig 3A; 67pp; English.
XX
CC The present sequence represents a fragment of open reading frame 7
CC (ORF7), bases 14653-14686, of the Lelystad isolate of Porcine
CC reproductive and respiratory syndrome virus (PRRSV). The present sequence
CC is highly conserved in PRRSV isolates, and is essential for RNA
CC replication. PRRSV is an Arterivirus. The specification describes an
CC Arterivirus replicon having some of its original arteriviral nucleic acid
CC encoding ORF7 deleted. The replicon is still capable of in vivo RNA
CC replication, even when further comprising nucleic acid derived from
CC another heterologous microorganism, thereby providing viable
CC Arteriviruses with deletions proximal to the 3' end of the genome. The
CC replicon is useful in obtaining a vaccine. The vaccine is used in
CC vaccinating animals, preferably pigs susceptible to PRRSV
XX
SQ Sequence 34 BP; 8 A; 10 C; 8 G; 0 T; 8 U; 0 Other;
XX
Query Match 1.5%; Score 30.8; DB 1; Length 34;
Best Local Similarity 73.5%; Pred. No. 3.9;
Matches 25; Conservative 7; Mismatches 2; Indels 0; Gaps 0;
XX
QY 1570 ATGGCCAGCCAGTCAATCAGCTGTGCCAGATGCT 1603
:|||||:|||||:|||||:|||||:
Db 1 AUGGCCAGCCAGUCAACAUCAACUGCCAGUGUCU 34
XX
RESULT 2
ADH29885/c
ID ADH29885 standard; DNA; 38 BP.
XX
AC ADH29885;
XX
DT 11-MAR-2004 (first entry)
XX
DE PRRS PCR primer #2 for ORF 4.
XX
KW Swinepox virus; viral vector; homology vector; vaccine; antigen; tumour;
KW cytokine; immune response; feline immunodeficiency virus infection;
KW heartworm; ss; PCR; primer.
XX
OS Porcine reproductive and respiratory syndrome virus.
XX
XX WO9622363-A1.
XX
PD 25-JUL-1996.
XX
XX 19-JAN-1996; 96WO-US001485.
XX
XX 19-JAN-1995; 95US-00375992.
XX 07-JUN-1995; 95US-00472679.
XX 07-JUN-1995; 95US-00480640.
XX 07-JUN-1995; 95US-00488237.
XX
XX (SYTR ) SYNTRO CORP.
XX
XX Cochran MD, Junker DE;
XX
XX WPI; 1996-354520/35.
XX
XX Recombinant swine:pox virus contg. foreign DNA sequence - useful for
XX delivery of vaccinating antigens or other therapeutic agents to humans or
XX animals.
XX
XX Example 37; Page 227; 502pp; English.
XX
```

XX The invention relates to a new recombinant swinepox virus (SPV)  
 CC comprising, inserted into a HindIII M, N or K fragment of the SPV genome,  
 CC a foreign DNA sequence that can be expressed in a SPV-infected host cell.  
 CC Also new are homology vectors for production of recombinant SPV  
 CC comprising double-stranded foreign sequence with, on both sides, double-  
 CC stranded SPV DNA homologous to the viral genome on either side of the  
 CC HindIII N fragment. The recombinant SPV are vectors for delivering  
 CC vaccinating antigens or therapeutic agents to humans, other mammals or  
 CC birds. The foreign DNA sequence may encode an antigen from an infectious  
 CC agent or tumour, or a cytokine to stimulate an immune response. SPV can  
 CC also be used as diagnostic reagents, e.g. to detect feline  
 CC immunodeficiency virus or D. immitis (heartworm) infection. SPV is only  
 CC weakly pathogenic, species specific and induces an immune response. The  
 CC present sequence is a PCR primer amplifying a foreign DNA sequence that  
 CC can be expressed in a SPV-infected host cell.  
 XX  
 SQ Sequence 38 BP; 15 A; 9 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 1.5%; Score 30; DB 1; Length 38;  
 Best Local Similarity 86.8%; Pred. No. 6.5;  
 Matches 33; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 387 GTCTTTTGGCAATCTGTTGGCAATTTGAATGTTTAAG 424  
 |||||  
 Db 38 GTCTTTTGGCAATCTGTTGGCAATTTGAAGATCCAG 1

RESULT 3  
 AAV26173/c  
 ID AAV26173 standard; DNA; 38 BP.  
 AC AAV26173;  
 XX  
 DT 24-JUL-1998 (first entry)  
 XX  
 DE PRRS ORF4 gene PCR primer SEQ ID NO:51 from WO9804684 Example 44.  
 XX  
 KW Swinepox virus; SPV; recombinant; vaccine; immunisation; diagnosis;  
 KW pseudorabies virus; feline immunodeficiency virus; FIV; heartworm;  
 KW Dirofilaria immitis; PCR primer; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9804684-A1.  
 XX  
 PD 05-FEB-1998.  
 XX  
 PF 25-JUL-1997; 97WO-US012212.  
 XX  
 PR 25-JUL-1996; 96US-00686968.  
 XX  
 PA (SYTR ) SYNTRO CORP.  
 XX  
 PI Cochran MD, Junker DE;  
 XX  
 DR WPI; 1998-130677/12.  
 XX  
 PT Recombinant swine pox virus - useful in vaccine for immunising animal  
 PT against swine pox virus.  
 XX  
 PS Example 44; Page 244; 473pp; English.

XX The present sequence represents a PCR primer used in an example from the  
 CC present invention. The present invention specifically describes  
 CC recombinant swinepox virus (SPV) comprising a foreign DNA (I) inserted  
 CC into a SPV genome which is capable of being expressed in a host cell into  
 CC which the virus is introduced, where (I) is inserted into: (a) an EcoRI  
 CC site within a region corresponding to a 3.2 kb subfragment of the HindIII  
 CC K fragment which contains both a HindIII and an EcoRI site, of the SPV  
 CC genome, and optionally (b) an AccI site within a region corresponding to  
 CC a 3.6 kb HindIII to BglII subfragment of the HindIII M fragment. The  
 CC recombinant SPV can be used in a vaccine for immunising an animal against

CC SPV. The invention also provides a method for testing a swine to  
 CC determine whether the swine has been vaccinated with the vaccine,  
 CC particularly containing S-SPV-008, or is infected with a naturally  
 CC occurring wild-type pseudorabies virus. Also (I) inserted into  
 CC recombinant SPV can be used in a diagnostic assay, e.g. Feline  
 CC immunodeficiency virus (FIV) env and gag genes and Dirofilaria immitis  
 CC p39 and 22kd are useful to detect feline immunodeficiency caused by FIV  
 CC and to detect heartworm caused by D. immitis respectively  
 XX  
 SQ Sequence 38 BP; 15 A; 9 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 1.5%; Score 30; DB 1; Length 38;  
 Best Local Similarity 86.8%; Pred. No. 6.5;  
 Matches 33; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 387 GTCTTTTGGCAATCTGTTGGCAATTTGAATGTTTAAG 424  
 |||||  
 Db 38 GTCTTTTGGCAATCTGTTGGCAATTTGAAGATCCAG 1

RESULT 4  
 AAV26123/c  
 ID AAV26123 standard; DNA; 38 BP.  
 AC AAV26123;  
 XX  
 DT 24-JUL-1998 (first entry)  
 XX  
 DE PRRS ORF4 gene PCR primer from WO9804684 Example 36.  
 XX  
 KW Swinepox virus; SPV; recombinant; vaccine; immunisation; diagnosis;  
 KW pseudorabies virus; feline immunodeficiency virus; FIV; heartworm;  
 KW Dirofilaria immitis; PCR primer; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9804684-A1.  
 XX  
 PD 05-FEB-1998.  
 XX  
 PF 25-JUL-1997; 97WO-US012212.  
 XX  
 PR 25-JUL-1996; 96US-00686968.  
 XX  
 PA (SYTR ) SYNTRO CORP.  
 XX  
 PI Cochran MD, Junker DE;  
 XX  
 DR WPI; 1998-130677/12.  
 XX  
 PT Recombinant swine pox virus - useful in vaccine for immunising animal  
 PT against swine pox virus.  
 XX  
 PS Example 36; Page 154; 473pp; English.

XX The present sequence represents a PCR primer used in an example from the  
 CC present invention. The present invention specifically describes  
 CC recombinant swinepox virus (SPV) comprising a foreign DNA (I) inserted  
 CC into a SPV genome which is capable of being expressed in a host cell into  
 CC which the virus is introduced, where (I) is inserted into: (a) an EcoRI  
 CC site within a region corresponding to a 3.2 kb subfragment of the HindIII  
 CC K fragment which contains both a HindIII and an EcoRI site, of the SPV  
 CC genome, and optionally (b) an AccI site within a region corresponding to  
 CC a 3.6 kb HindIII to BglII subfragment of the HindIII M fragment. The  
 CC recombinant SPV can be used in a vaccine for immunising an animal against  
 CC SPV. The invention also provides a method for testing a swine to  
 CC determine whether the swine has been vaccinated with the vaccine,  
 CC particularly containing S-SPV-008, or is infected with a naturally  
 CC occurring wild-type pseudorabies virus. Also (I) inserted into  
 CC recombinant SPV can be used in a diagnostic assay, e.g. Feline  
 CC immunodeficiency virus (FIV) env and gag genes and Dirofilaria immitis  
 CC p39 and 22kd are useful to detect feline immunodeficiency caused by FIV  
 CC and to detect heartworm caused by D. immitis respectively

```
XX SQ Sequence 38 BP; 15 A; 9 C; 7 G; 7 T; 0 U; 0 Other;
      Query Match      1.5%; Score 30; DB 1; Length 38;
      Best Local Similarity 86.8%; Pred. No. 6.5;
      Matches 33; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 387 GTCCTTTTGGCATTCTGTGGCAATTGTAATGTTTAAG 424
      ||||||| ||||||| ||||||| ||||||| ||||||| ||
DB 38 GTCCTTTTGGCATTCTGTGGCAATTGTAATGTTTAAG 424
      ||||||| ||||||| ||||||| ||||||| ||||||| ||

RESULT 5
AAZ58034/c
ID AAZ58034 standard; DNA; 38 BP.
XX
AC AAZ58034;
XX
XX 06-AUG-2003 (revised)
DT 25-APR-2000 (first entry)
DE Porcine reproductive and respiratory syndrome virus ORF4 3' primer.
XX
XX PRRS; raccoonpox virus; vaccine; homology vector 902-49.23; PCR primer;
KW SS.
XX Porcine reproductive and respiratory syndrome virus.
XX OS
XX WO200003030-A2.
XX
XX 20-JAN-2000.
XX
XX 09-JUL-1999; 99WO-US015565.
XX
XX 10-JUL-1998; 98US-00113750.
XX
XX (SCHE ) SCHERING-PLOUGH LTD.
XX
XX Cochran MD, Junker DE;
XX
XX WPI; 2000-171150/15.
XX
XX New recombinant raccoonpox virus containing foreign DNA inserted into a
PT non-essential region within the HindIII U genomic region, useful as a
PT vaccine against pathogens in mammalian and avian species.
XX
XX Disclosure; Page 46; 164pp; English.
XX
XX The present sequence is that of downstream primer 1/96.12 used in the PCR
CC amplification of open reading frame 4 (ORF4) of swine reproductive and
CC respiratory syndrome virus (PRRS). It is based on the 3' end of the PRRS
CC ORF4. The PCR product was used in the construction of homology vector 902
CC -49.23, which incorporates a beta-galactosidase marker gene and PRRS ORF4
CC flanked by raccoonpox virus (RPV) DNA, and was constructed for the
CC purpose of inserting foreign DNA into recombinant RPV. Recombinant RPVs
CC of the invention have foreign DNA inserted into non-essential regions of
CC the RPV genome. They can be included in vaccines against animal
CC pathogens, useful for immunising animals (especially avian species or
CC mammals, including humans) against animal pathogens (claimed), e.g.
CC feline pathogens (claimed) or human pathogens such as hepatitis B virus,
CC human immunodeficiency virus, human influenza etc. (Updated on 06-AUG-
CC 2003 to correct OS field.)
XX
XX Sequence 38 BP; 15 A; 9 C; 7 G; 7 T; 0 U; 0 Other;
      Query Match      1.5%; Score 30; DB 1; Length 38;
      Best Local Similarity 86.8%; Pred. No. 6.5;
      Matches 33; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 387 GTCCTTTTGGCATTCTGTGGCAATTGTAATGTTTAAG 424
      ||||||| ||||||| ||||||| ||||||| ||||||| ||
DB 38 GTCCTTTTGGCATTCTGTGGCAATTGTAATGTTTAAG 424
      ||||||| ||||||| ||||||| ||||||| ||||||| ||
```

```
RESULT 6
ADH29891/c
ID ADH29891 standard; DNA; 33 BP.
XX
AC ADH29891;
XX
XX 11-MAR-2004 (first entry)
DT
DE PRRS PCR primer #2 for ORF 7.
XX
XX Swinepox virus; viral vector; homology vector; vaccine; antigen; tumour;
KW cytokine; immune response; feline immunodeficiency virus infection;
KW heartworm; ss; PCR; primer.
XX
XX Porcine reproductive and respiratory syndrome virus.
XX OS
XX WO9622363-A1.
XX
XX 25-JUL-1996.
XX
XX 19-JAN-1996; 96WO-US001485.
XX
XX 19-JAN-1995; 95US-00375992.
PR 07-JUN-1995; 95US-00472679.
PR 07-JUN-1995; 95US-00480640.
PR 07-JUN-1995; 95US-00488237.
XX
XX (SYTR ) SYNTRO CORP.
XX
XX Cochran MD, Junker DE;
XX
XX WPI; 1996-354520/35.
XX
XX Recombinant swine:pox virus contg. foreign DNA sequence - useful for
PT delivery of vaccinating antigens or other therapeutic agents to humans or
PT animals.
XX
XX Example 37; Page 228; 502pp; English.
XX
XX The invention relates to a new recombinant swinepox virus (SPV)
CC comprising, inserted into a HindIII M, N or K fragment of the SPV genome,
CC a foreign DNA sequence that can be expressed in a SPV-infected host cell.
CC Also new are homology vectors for production of recombinant SPV
CC comprising double-stranded foreign sequence with, on both sides, double-
CC stranded SPV DNA homologous to the viral genome on either side of the
CC HindIII N fragment. The recombinant SPV are vectors for delivering
CC vaccinating antigens or therapeutic agents to humans, other mammals or
CC birds. The foreign DNA sequence may encode an antigen from an infectious
CC agent or tumour, or a cytokine to stimulate an immune response. SPV can
CC also be used as diagnostic reagents, e.g. to detect feline
CC immunodeficiency virus of D. immitis (heartworm) infection. SPV is only
CC weakly pathogenic, species specific and induces an immune response. The
CC present sequence is a PCR primer amplifying a foreign DNA sequence that
CC can be expressed in a SPV-infected host cell.
XX
XX Sequence 33 BP; 8 A; 9 C; 10 G; 6 T; 0 U; 0 Other;
      Query Match      1.5%; Score 29.8; DB 1; Length 33;
      Best Local Similarity 93.9%; Pred. No. 5.1;
      Matches 31; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1882 CATCACCTCAGCATGATGGCTGGCATTTCTTG 1914
      ||||||| ||||||| ||||||| ||||||| ||||||| ||
DB 33 CATCACCTCAGCATGATGGCTGGCATTTCTTG 1

RESULT 7
AAV26169/c
ID AAV26169 standard; DNA; 33 BP.
XX
AC AAV26169;
XX
```



DT 24-JUL-1998 (first entry)  
 DE PRRS ORF7 gene PCR primer SEQ ID NO:47 from WO9804684 Example 44.  
 XX  
 XX Swinepox virus; SPV; recombinant; vaccine; immunisation; diagnosis;  
 KW pseudorabies virus; feline immunodeficiency virus; FIV; heartworm;  
 KW Dirofilaria immitis; PCR primer; ss.  
 XX  
 OS Synthetic.  
 XX  
 OS WO9804684-A1.  
 PN  
 XX  
 XX 05-FEB-1998.  
 PD  
 XX  
 XX 25-JUL-1997; 97WO-US012212.  
 PF  
 XX  
 XX 25-JUL-1996; 96US-00686968.  
 PR  
 XX  
 XX (SYTR ) SYNTRO CORP.  
 PA  
 XX Cochran MD, Junker DE;  
 PI  
 XX WPI; 1998-130677/12.  
 XX  
 XX Recombinant swine pox virus - useful in vaccine for immunising animal  
 PT against swine pox virus.  
 PT  
 XX  
 XX Example 44; Page 238; 473pp; English.  
 PS  
 XX The present sequence represents a PCR primer used in an example from the  
 CC present invention. The present invention specifically describes  
 CC recombinant swinepox virus (SPV) comprising a foreign DNA (I) inserted  
 CC into a SPV genome which is capable of being expressed in a host cell into  
 CC which the virus is introduced, where (I) is inserted into: (a) an EcoRI  
 CC site within a region corresponding to a 3.2 kb subfragment of the HindIII  
 CC K fragment which contains both a HindIII and an EcoRI site, of the SPV  
 CC genome, and optionally (b) an AccI site within a region corresponding to  
 CC a 3.6 kb HindIII to BglII subfragment of the HindIII M fragment. The  
 CC recombinant SPV can be used in a vaccine for immunising an animal against  
 CC SPV. The invention also provides a method for testing a swine to  
 CC determine whether the swine has been vaccinated with the vaccine,  
 CC particularly containing S-SPV-008, or is infected with a naturally  
 CC occurring wild-type pseudorabies virus. Also (I) inserted into  
 CC recombinant SPV can be used in a diagnostic assay, e.g. Feline  
 CC immunodeficiency virus (FIV) env and gag genes and Dirofilaria immitis  
 CC p39 and 22kd are useful to detect feline immunodeficiency caused by FIV  
 CC and to detect heartworm caused by D. immitis respectively  
 XX  
 XX Sequence 33 BP; 8 A; 9 C; 10 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 1.5%; Score 29.8; DB 1; Length 33;  
 Best Local Similarity 93.9%; Pred. No. 5.1;  
 Matches 31; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1882 CATCACCTCAGCATGATGGCTGGCATCTTTG 1914  
 DB |||||  
 33 CATCACCTCAGCATGATGGCTGGCATCTTTG 1

RESULT 8  
 ADH29890  
 ID ADH29890 standard; DNA; 37 BP.  
 XX  
 XX ADH29890;  
 AC  
 XX 11-MAR-2004 (first entry)  
 DT  
 XX PRRS PCR primer #1 for ORF 7.  
 DE  
 XX Swinepox virus; viral vector; homology vector; vaccine; antigen; tumour;  
 KW cytokine; immune response; feline immunodeficiency virus infection;  
 KW heartworm; ss; PCR; primer.  
 XX

OS Porcine reproductive and respiratory syndrome virus.  
 XX  
 XX WO9622363-A1.  
 XX  
 XX 25-JUL-1996.  
 PD  
 XX 19-JAN-1996; 96WO-US001485.  
 PF  
 XX 19-JAN-1995; 95US-00375992.  
 PR 07-JUN-1995; 95US-00472679.  
 PR 07-JUN-1995; 95US-00480640.  
 PR 07-JUN-1995; 95US-00488237.  
 XX  
 XX (SYTR ) SYNTRO CORP.  
 PA  
 XX Cochran MD, Junker DE;  
 PI  
 XX WPI; 1996-354520/35.  
 DR  
 XX Recombinant swinepox virus contg. foreign DNA sequence - useful for  
 PT delivery of vaccinating antigens or other therapeutic agents to humans or  
 PT animals.  
 PT  
 XX Example 37; Page 228; 502pp; English.  
 PS  
 XX The invention relates to a new recombinant swinepox virus (SPV)  
 CC comprising, inserted into a HindIII M, N or K fragment of the SPV genome,  
 CC a foreign DNA sequence that can be expressed in a SPV-infected host cell.  
 CC Also new are homology vectors for production of recombinant SPV  
 CC comprising double-stranded foreign sequence with, on both sides, double-  
 CC stranded SPV DNA homologous to the viral genome on either side of the  
 CC HindIII N fragment. The recombinant SPV are vectors for delivering  
 CC vaccinating antigens or therapeutic agents to humans, other mammals or  
 CC birds. The foreign DNA sequence may encode an antigen from an infectious  
 CC agent or tumour, or a cytokine to stimulate an immune response. SPV can  
 CC also be used as diagnostic reagents, e.g. to detect feline  
 CC immunodeficiency virus of D. immitis (heartworm) infection. SPV is only  
 CC weakly pathogenic, species specific and induces an immune response. The  
 CC present sequence is a PCR primer amplifying a foreign DNA sequence that  
 CC can be expressed in a SPV-infected host cell.  
 XX  
 XX Sequence 37 BP; 15 A; 9 C; 9 G; 4 T; 0 U; 0 Other;  
 SQ  
 Query Match 1.4%; Score 29; DB 1; Length 37;  
 Best Local Similarity 86.5%; Pred. No. 8.5;  
 Matches 32; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 QY 1520 GTTAATATGCCAATAACACCGGCAAGCAGCAGAG 1556  
 DB |||||  
 1 GTGCAATTCGCCAATAACACCGGCAAGCAGCAGAG 37

RESULT 9  
 AAV26168  
 ID AAV26168 standard; DNA; 37 BP.  
 XX  
 XX AAV26168;  
 AC  
 XX 24-JUL-1998 (first entry)  
 DT  
 XX PRRS ORF7 gene PCR primer SEQ ID NO:46 from WO9804684 Example 44.  
 DE  
 XX Swinepox virus; SPV; recombinant; vaccine; immunisation; diagnosis;  
 KW pseudorabies virus; feline immunodeficiency virus; FIV; heartworm;  
 KW Dirofilaria immitis; PCR primer; ss.  
 XX  
 XX Synthetic.  
 OS  
 XX WO9804684-A1.  
 PN  
 XX 05-FEB-1998.  
 PD  
 XX 25-JUL-1997; 97WO-US012212.  
 PF



CC The invention relates to an isolated polynucleotide comprising an  
CC infectious cDNA encoding a North American Porcine Reproductive and  
CC Respiratory Syndrome Virus (PRRSV) RNA transcript. Also included are the  
CC following: (1) a method of producing full-length infectious PRRSV cDNA;  
CC (2) a method of producing infectious virus particles from an isolated  
CC full-length infectious PRRSV cDNA clone; and (3) a composition comprising  
CC the isolated polynucleotide or full-length infectious PRRSV cDNA. The  
CC polynucleotide further comprises: at least one nucleotide deletion in at  
CC least one of the 3' end of ORF7 and 5' end of 3' untranslated region; and  
CC one or more mutations, where the mutation is non-silent mutation in ORF5  
CC or ORF7. It encodes a porcine viral polypeptide, which is a capsid  
CC protein of Porcine Circovirus Type II or its portion. The polynucleotide  
CC is useful for preparing a vaccine against PRRSV infection. The present  
CC sequence represents a primer used to construct full-length clones of cDNA  
CC encoding a North American Porcine Reproductive and Respiratory Syndrome  
CC Virus (PRRSV) RNA transcript.  
XX  
SQ Sequence 27 BP; 8 A; 10 C; 3 G; 6 T; 0 U; 0 Other;  
  
Query Match 1.3%; Score 27; DB 1; Length 27;  
Best Local Similarity 100.0%; Pred. No. 8.1;  
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 2000 CGACCGTGTGGGGTAAGATTTAATTG 2026  
DB |||||  
27 CGACCGTGTGGGGTAAGATTTAATTG 1  
  
RESULT 12  
AAZ58047  
ID AAZ58047 standard; DNA; 34 BP.  
XX  
AC AAZ58047;  
XX  
AT 06-AUG-2003 (revised)  
DT 25-APR-2000 (first entry)  
XX  
DE Porcine reproductive and respiratory syndrome virus ORF5 5' primer.  
XX  
KW PRRS; racoonpox virus; vaccine; homology vector 938-94.25; PCR primer;  
KW ss.  
XX  
OS Porcine reproductive and respiratory syndrome virus.  
XX  
PN WO200003030-A2.  
XX  
PD 20-JAN-2000.  
XX  
PF 09-JUL-1999; 99WO-US015565.  
XX  
PR 10-JUL-1998; 98US-00113750.  
XX  
PA (SCHE ) SCHERING-PLOUGH LTD.  
XX  
PI Cochran MD, Junker DE;  
XX  
DR WPI; 2000-171150/15.  
XX  
PT New recombinant racoonpox virus containing foreign DNA inserted into a  
PT non-essential region within the HindIII U genomic region, useful as a  
PT vaccine against pathogens in mammalian and avian species.  
XX  
PS Disclosure; Page 62; 164pp; English.  
XX  
CC The present sequence is that of upstream primer 9/97.5 used in the PCR  
CC amplification of open reading frame 5 (ORF5) of swine reproductive and  
CC respiratory syndrome virus (PRRS). It is based on the 5' end of the PRRS  
CC ORF5, and introduces an EcoRI site at the 5' end of the gene. The PCR  
CC product was used in the construction of homology vector 938-94.25, which  
CC incorporates a beta-glucuronidase marker gene and the PRRS ORF5 gene  
CC flanked by racoonpox virus (RPV) DNA, and was constructed for the  
CC purpose of inserting foreign DNA into recombinant RPV. Recombinant RPVs  
CC of the invention have foreign DNA inserted into non-essential regions of

CC the RPV genome. They can be included in vaccines against animal  
CC pathogens, useful for immunising animals (especially avian species or  
CC mammals, including humans) against animal pathogens (claimed), e.g.  
CC feline pathogens (claimed) or human pathogens such as hepatitis B virus,  
CC human immunodeficiency virus, human influenza etc. (Updated on 06-AUG-  
CC 2003 to correct OS field.)  
XX  
SQ Sequence 34 BP; 8 A; 7 C; 13 G; 6 T; 0 U; 0 Other;  
  
Query Match 1.3%; Score 26.6; DB 1; Length 34;  
Best Local Similarity 87.9%; Pred. No. 16;  
Matches 29; Conservative 0; Mismatches 4; Indels 0; Gaps 0;  
  
QY 422 AGATATGTTGGGGAATGCTTGACCGCGGCTG 454  
DB |||||  
2 AAGGAATTCGGGGAATGCTTGACCGCGGCTG 34  
  
RESULT 13  
ADH29887/c  
ID ADH29887 standard; DNA; 34 BP.  
XX  
AC ADH29887;  
XX  
DT 11-MAR-2004 (first entry)  
XX  
DE PRRS PCR primer #2 for ORF 5.  
XX  
KW Swinepox virus; viral vector; homology vector; vaccine; antigen; tumour;  
KW cytokine; immune response; feline immunodeficiency virus infection;  
KW heartworm; ss; PCR; primer.  
XX  
OS Porcine reproductive and respiratory syndrome virus.  
XX  
PN WO9622363-A1.  
XX  
PD 25-JUL-1996.  
XX  
PF 19-JAN-1996; 96WO-US001485.  
XX  
PR 19-JAN-1995; 95US-00375992.  
PR 07-JUN-1995; 95US-00472679.  
PR 07-JUN-1995; 95US-00480640.  
PR 07-JUN-1995; 95US-00488237.  
XX  
PA (SYTR ) SYNTRO CORP.  
XX  
PI Cochran MD, Junker DE;  
XX  
DR WPI; 1996-354520/35.  
XX  
PT Recombinant swine:pox virus contg. foreign DNA sequence - useful for  
PT delivery of vaccinating antigens or other therapeutic agents to humans or  
PT animals.  
XX  
PS Example 37; Page 228; 502pp; English.  
XX  
CC The invention relates to a new recombinant swinepox virus (SPV)  
CC comprising, inserted into a HindIII M, N or K fragment of the SPV genome,  
CC a foreign DNA sequence that can be expressed in a SPV-infected host cell.  
CC Also new are homology vectors for production of recombinant SPV  
CC comprising double-stranded foreign sequence with, on both sides, double-  
CC stranded SPV DNA homologous to the viral genome on either side of the  
CC HindIII N fragment. The recombinant SPV are vectors for delivering  
CC vaccinating antigens or therapeutic agents to humans, other mammals or  
CC birds. The foreign DNA sequence may encode an antigen from an infectious  
CC agent or tumour, or a cytokine to stimulate an immune response. SPV can  
CC also be used as diagnostic reagents, e.g. to detect feline  
CC immunodeficiency virus of D. immitis (heartworm) infection. SPV is only  
CC weakly pathogenic, species specific and induces an immune response. The  
CC present sequence is a PCR primer amplifying a foreign DNA sequence that  
CC can be expressed in a SPV-infected host cell.  
XX

```
SQ Sequence 34 BP; 8 A; 10 C; 9 G; 7 T; 0 U; 0 Other;
  Query Match      1.3%; Score 26; DB 1; Length 34;
  Best Local Similarity 85.3%; Pred. No. 19;
  Matches 29; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1003 CAGCGGACAAATGGAGTCGTCCTTAGATGACCTTC 1036
    |||||
DB 34 CAGCGGACAAATGGAGTCGTCCTTAGATGACCTTC 1

RESULT 14
AAV26125/c
ID AAV26125 standard; DNA; 34 BP.
AC AAV26125;
XX
XX
XX 24-JUL-1998 (first entry)
XX
XX PRRS ORF5 gene PCR primer from WO9804684 Example 36.
DE
XX Swinepox virus; SPV; recombinant; vaccine; immunisation; diagnosis;
KW pseudorabies virus; feline immunodeficiency virus; FIV; heartworm;
KW Dirofilaria immitis; PCR primer; ss.
XX
XX Synthetic.
XX
XX WO9804684-A1.
XX
XX 05-FEB-1998.
XX
XX 25-JUL-1997; 97WO-US012212.
XX
XX 25-JUL-1996; 96US-00686968.
XX
XX (SYTR ) SYNTRO CORP.
XX
XX Cochran MD, Junker DE;
XX
XX WPI; 1998-130677/12.
XX
XX Recombinant swine pox virus - useful in vaccine for immunising animal
PT against swine pox virus.
PT
XX
XX Example 36; Page 155; 473pp; English.
XX
XX The present sequence represents a PCR primer used in an example from the
CC present invention. The present invention specifically describes
CC recombinant swinepox virus (SPV) comprising a foreign DNA (I) inserted
CC into a SPV genome which is capable of being expressed in a host cell into
CC which the virus is introduced, where (I) is inserted into: (a) an EcoRI
CC site within a region corresponding to a 3.2 kb subfragment of the HindIII
CC K fragment which contains both a HindIII and an EcoRI site, of the SPV
CC genome, and optionally (b) an AccI site within a region corresponding to
CC a 3.6 kb HindIII to BglII subfragment of the HindIII M fragment. The
CC recombinant SPV can be used in a vaccine for immunising an animal against
CC SPV. The invention also provides a method for testing a swine to
CC determine whether the swine has been vaccinated with the vaccine,
CC particularly containing S-SPV-008, or is infected with a naturally
CC occurring wild-type pseudorabies virus. Also (I) inserted into
CC recombinant SPV can be used in a diagnostic assay, e.g. Feline
CC immunodeficiency virus (FIV) env and gag genes and Dirofilaria immitis
CC p39 and 22kd are useful to detect feline immunodeficiency caused by FIV
CC and to detect heartworm caused by D. immitis respectively
XX
XX Sequence 34 BP; 8 A; 10 C; 9 G; 7 T; 0 U; 0 Other;

  Query Match      1.3%; Score 26; DB 1; Length 34;
  Best Local Similarity 85.3%; Pred. No. 19;
  Matches 29; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1003 CAGCGGACAAATGGAGTCGTCCTTAGATGACCTTC 1036
    |||||
DB 34 CAGCGGACAAATGGAGTCGTCCTTAGATGACCTTC 1

RESULT 15
AAV26175/c
ID AAV26175 standard; DNA; 34 BP.
XX
XX AAV26175;
XX
XX 24-JUL-1998 (first entry)
XX
XX PRRS ORF5 gene PCR primer SEQ ID NO:53 from WO9804684 Example 44.
DE
XX Swinepox virus; SPV; recombinant; vaccine; immunisation; diagnosis;
KW pseudorabies virus; feline immunodeficiency virus; FIV; heartworm;
KW Dirofilaria immitis; PCR primer; ss.
XX
XX Synthetic.
XX
XX WO9804684-A1.
XX
XX 05-FEB-1998.
XX
XX 25-JUL-1997; 97WO-US012212.
XX
XX 25-JUL-1996; 96US-00686968.
XX
XX (SYTR ) SYNTRO CORP.
XX
XX Cochran MD, Junker DE;
XX
XX WPI; 1998-130677/12.
XX
XX Recombinant swine pox virus - useful in vaccine for immunising animal
PT against swine pox virus.
PT
XX
XX Example 44; Page 246; 473pp; English.
XX
XX The present sequence represents a PCR primer used in an example from the
CC present invention. The present invention specifically describes
CC recombinant swinepox virus (SPV) comprising a foreign DNA (I) inserted
CC into a SPV genome which is capable of being expressed in a host cell into
CC which the virus is introduced, where (I) is inserted into: (a) an EcoRI
CC site within a region corresponding to a 3.2 kb subfragment of the HindIII
CC K fragment which contains both a HindIII and an EcoRI site, of the SPV
CC genome, and optionally (b) an AccI site within a region corresponding to
CC a 3.6 kb HindIII to BglII subfragment of the HindIII M fragment. The
CC recombinant SPV can be used in a vaccine for immunising an animal against
CC SPV. The invention also provides a method for testing a swine to
CC determine whether the swine has been vaccinated with the vaccine,
CC particularly containing S-SPV-008, or is infected with a naturally
CC occurring wild-type pseudorabies virus. Also (I) inserted into
CC recombinant SPV can be used in a diagnostic assay, e.g. Feline
CC immunodeficiency virus (FIV) env and gag genes and Dirofilaria immitis
CC p39 and 22kd are useful to detect feline immunodeficiency caused by FIV
CC and to detect heartworm caused by D. immitis respectively
XX
XX Sequence 34 BP; 8 A; 10 C; 9 G; 7 T; 0 U; 0 Other;

  Query Match      1.3%; Score 26; DB 1; Length 34;
  Best Local Similarity 85.3%; Pred. No. 19;
  Matches 29; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1003 CAGCGGACAAATGGAGTCGTCCTTAGATGACCTTC 1036
    |||||
DB 34 CAGCGGACAAATGGAGTCGTCCTTAGATGACCTTC 1

RESULT 16
AAZ58036/c
ID AAZ58036 standard; DNA; 34 BP.
XX
XX AAZ58036;
```



PA (SYTR ) SYNTRO CORP.  
 XX Cochran MD, Junker DE;  
 XX WPI; 1996-354520/35.  
 XX Recombinant swine:pox virus contg. foreign DNA sequence - useful for  
 PT delivery of vaccinating antigens or other therapeutic agents to humans or  
 PT animals.  
 XX Example 37; Page 227; 502pp; English.  
 XX The invention relates to a new recombinant swinepox virus (SPV)  
 CC comprising, inserted into a HindIII M, N or K fragment of the SPV genome,  
 CC a foreign DNA sequence that can be expressed in a SPV-infected host cell.  
 CC Also new are homology vectors for production of recombinant SPV  
 CC comprising double-stranded foreign sequence with, on both sides, double-  
 CC stranded SPV DNA homologous to the viral genome on either side of the  
 CC HindIII N fragment. The recombinant SPV are vectors for delivering  
 CC vaccinating antigens or therapeutic agents to humans, other mammals or  
 CC birds. The foreign DNA sequence may encode an antigen from an infectious  
 CC agent or tumour, or a cytokine to stimulate an immune response. SPV can  
 CC also be used as diagnostic reagents, e.g. to detect feline  
 CC immunodeficiency virus of D. immitis (heartworm) infection. SPV is only  
 CC weakly pathogenic, species specific and induces an immune response. The  
 CC present sequence is a PCR primer amplifying a foreign DNA sequence that  
 CC can be expressed in a SPV-infected host cell.  
 XX  
 XX Sequence 33 BP; 7 A; 6 C; 11 G; 9 T; 0 U; 0 Other;  
 SQ Query Match 1.2%; Score 25; DB 1; Length 33;  
 Best Local Similarity 84.8%; Pred. No. 24;  
 Matches 28; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 QY 420 TTAAGTATGTTGGGAAATGCTTGACCGGGC 452  
 DB 1 TTGAATTCGTTGGAGAAATGCTTGACCGGGC 33  
 RESULT 19  
 AAV26124  
 ID AAV26124 standard; DNA; 33 BP.  
 AC AAV26124;  
 XX 24-JUL-1998 (first entry)  
 DE PRRS ORF5 gene PCR primer from WO9804684 Example 36.  
 XX Swinepox virus; SPV; recombinant; vaccine; immunisation; diagnosis;  
 XX pseudorabies virus; feline immunodeficiency virus; FIV; heartworm;  
 XX Dirofilaria immitis; PCR primer; ss.  
 XX Synthetic.  
 OS WO9804684-A1.  
 PN 05-FEB-1998.  
 XX 25-JUL-1997; 97WO-US012212.  
 XX 25-JUL-1996; 96US-00686968.  
 XX (SYTR ) SYNTRO CORP.  
 XX Cochran MD, Junker DE;  
 XX WPI; 1998-130677/12.  
 XX Recombinant swine pox virus - useful in vaccine for immunising animal  
 PT against swine pox virus.  
 XX Example 36; Page 155; 473pp; English.

XX The present sequence represents a PCR primer used in an example from the  
 CC present invention. The present invention specifically describes  
 CC recombinant swinepox virus (SPV) comprising a foreign DNA (I) inserted  
 CC into a SPV genome which is capable of being expressed in a host cell into  
 CC which the virus is introduced, where (I) is inserted into: (a) an EcoRI  
 CC site within a region corresponding to a 3.2 kb subfragment of the HindIII  
 CC K fragment which contains both a HindIII and an EcoRI site, of the SPV  
 CC genome, and optionally (b) an AccI site within a region corresponding to  
 CC a 3.6 kb HindIII to BglII subfragment of the HindIII M fragment. The  
 CC recombinant SPV can be used in a vaccine for immunising an animal against  
 CC SPV. The invention also provides a method for testing a swine to  
 CC determine whether the swine has been vaccinated with the vaccine,  
 CC particularly containing S-SPV-008, or is infected with a naturally  
 CC occurring wild-type pseudorabies virus. Also (I) inserted into  
 CC recombinant SPV can be used in a diagnostic assay, e.g. Feline  
 CC immunodeficiency virus (FIV) env and gag genes and Dirofilaria immitis  
 CC p39 and 22kd are useful to detect feline immunodeficiency caused by FIV  
 CC and to detect heartworm caused by D. immitis respectively  
 XX  
 XX Sequence 33 BP; 7 A; 6 C; 11 G; 9 T; 0 U; 0 Other;  
 SQ Query Match 1.2%; Score 25; DB 1; Length 33;  
 Best Local Similarity 84.8%; Pred. No. 24;  
 Matches 28; Conservative 0; Mismatches 5; Indels 0; Gaps 0;  
 QY 420 TTAAGTATGTTGGGAAATGCTTGACCGGGC 452  
 DB 1 TTGAATTCGTTGGAGAAATGCTTGACCGGGC 33  
 RESULT 20  
 AAV26174  
 ID AAV26174 standard; DNA; 33 BP.  
 AC AAV26174;  
 XX 24-JUL-1998 (first entry)  
 DE PRRS ORF5 gene PCR primer SEQ ID NO:52 from WO9804684 Example 44.  
 XX Swinepox virus; SPV; recombinant; vaccine; immunisation; diagnosis;  
 XX pseudorabies virus; feline immunodeficiency virus; FIV; heartworm;  
 XX Dirofilaria immitis; PCR primer; ss.  
 XX Synthetic.  
 OS WO9804684-A1.  
 PN 05-FEB-1998.  
 XX 25-JUL-1997; 97WO-US012212.  
 XX 25-JUL-1996; 96US-00686968.  
 XX (SYTR ) SYNTRO CORP.  
 XX Cochran MD, Junker DE;  
 XX WPI; 1998-130677/12.  
 XX Recombinant swine pox virus - useful in vaccine for immunising animal  
 PT against swine pox virus.  
 XX Example 44; Page 246; 473pp; English.  
 XX The present sequence represents a PCR primer used in an example from the  
 CC present invention. The present invention specifically describes  
 CC recombinant swinepox virus (SPV) comprising a foreign DNA (I) inserted  
 CC into a SPV genome which is capable of being expressed in a host cell into  
 CC which the virus is introduced, where (I) is inserted into: (a) an EcoRI  
 CC site within a region corresponding to a 3.2 kb subfragment of the HindIII  
 CC K fragment which contains both a HindIII and an EcoRI site, of the SPV  
 CC genome, and optionally (b) an AccI site within a region corresponding to  
 CC a 3.6 kb HindIII to BglII subfragment of the HindIII M fragment. The  
 CC recombinant SPV can be used in a vaccine for immunising an animal against  
 CC SPV. The invention also provides a method for testing a swine to  
 CC determine whether the swine has been vaccinated with the vaccine,  
 CC particularly containing S-SPV-008, or is infected with a naturally  
 CC occurring wild-type pseudorabies virus. Also (I) inserted into  
 CC recombinant SPV can be used in a diagnostic assay, e.g. Feline  
 CC immunodeficiency virus (FIV) env and gag genes and Dirofilaria immitis  
 CC p39 and 22kd are useful to detect feline immunodeficiency caused by FIV  
 CC and to detect heartworm caused by D. immitis respectively  
 XX

The present sequence is that of upstream primer 1/96.13 used in the PCR amplification of open reading frame 5 (ORF5) of swine reproductive and respiratory syndrome virus (PRRS). It is based on the 5' end of the PRRS ORF5, and introduces an EcoRI site at the 5' end of the gene. The PCR product was used in the construction of homology vector 902-49.34, which incorporates a beta-galactosidase marker gene and the PRRS ORF5 gene flanked by raccoonpox virus (RPV) DNA, and was constructed for the purpose of inserting foreign DNA into recombinant RPV. Recombinant RPVs of the invention have foreign DNA inserted into non-essential regions of the RPV genome. They can be included in vaccines against animal pathogens, useful for immunising animals (especially avian species or mammals, including humans) against animal pathogens (claimed), e.g. feline pathogens (claimed) or human pathogens such as hepatitis B virus, human immunodeficiency virus, human influenza etc. (Updated on 06-Aug-2009)

77 CCTCAGTGCCGCACGGCGGATAGGGACACCCG 107

QY  
77 C T C A G T C C G C A C G G C G A T A G G G A C A C C C G 107

```

Db      31 CCTCAGTCCGTACGGCGATAGGAATTCGCC 1
RESULT 23
ADH29883/C
ID      ADH29883 standard; DNA; 30 BP.
XX
AC      ADH29883;
XX
DT      11-MAR-2004 (first entry)
XX
DE      PRRS PCR primer #2 for ORF 3.
XX
KW      Swinepox virus; viral vector; homology vector; vaccine; antigen; tumour;
KW      cytokine; immune response; feline immunodeficiency virus infection;
KW      heartworm; ss; PCR; primer.
XX
OS      Porcine reproductive and respiratory syndrome virus.
XX
PN      WO9622363-A1.
XX
PD      25-JUL-1996.
XX
PF      19-JAN-1996; 96WO-US001485.
XX
PR      19-JAN-1995; 95US-00375992.
PR      07-JUN-1995; 95US-00472679.
PR      07-JUN-1995; 95US-00480640.
PR      07-JUN-1995; 95US-00488237.
XX
PA      (SYTR ) SYNTRO CORP.
XX
PI      Cochran MD, Junker DE;
XX
DR      WPI; 1996-354520/35.
XX
PT      Recombinant swinepox virus contg. foreign DNA sequence - useful for
PT      delivery of vaccinating antigens or other therapeutic agents to humans or
PT      animals.
XX
PS      Example 37; Page 227; 502pp; English.
XX
CC      The invention relates to a new recombinant swinepox virus (SPV)
CC      comprising, inserted into a HindIII M, N or K fragment of the SPV genome,
CC      a foreign DNA sequence that can be expressed in a SPV-infected host cell.
CC      Also new are homology vectors for production of recombinant SPV
CC      comprising double-stranded foreign sequence with, on both sides, double-
CC      stranded SPV DNA homologous to the viral genome on either side of the
CC      HindIII N fragment. The recombinant SPV are vectors for delivering
CC      vaccinating antigens or therapeutic agents to humans, other mammals or
CC      birds. The foreign DNA sequence may encode an antigen from an infectious
CC      agent or tumour, or a cytokine to stimulate an immune response. SPV can
CC      also be used as diagnostic reagents, e.g. to detect feline
CC      immunodeficiency virus of D. immitis (heartworm) infection. SPV is only
CC      weakly pathogenic, species specific and induces an immune response. The
CC      present sequence is a PCR primer amplifying a foreign DNA sequence that
CC      can be expressed in a SPV-infected host cell.
XX
SQ      Sequence 30 BP; 5 A; 8 C; 12 G; 5 T; 0 U; 0 Other;

Query Match      1.2%; Score 23.6; DB 1; Length 30;
Best Local Similarity 86.7%; Pred. No. 31;
Matches 26; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY      76 CCTCAGTCCCGACGGCGATAGGCACACC 105
      |||||
DB      30 CCTCAGTCCCGTACGGCGATAGGATCCCC 1

RESULT 24
AAV26121/C
ID      AAV26121 standard; DNA; 30 BP.
XX
AC      AAV26121;
XX
DT      24-JUL-1998 (first entry)
XX
DE      PRRS ORF3 gene PCR primer SEQ ID NO:49 from WO9804684 Example 44.
XX
KW      Swinepox virus; SPV; recombinant; vaccine; immunisation; diagnosis;
KW      pseudorabies virus; feline immunodeficiency virus; FIV; heartworm;
KW      pseudorabies virus; feline immunodeficiency virus; FIV; heartworm;

```





CC The present sequence is that of downstream primer 1/96.8 used in the PCR  
 CC amplification of open reading frame 3 (ORF3) of swine reproductive and  
 CC respiratory syndrome virus (PRRS). It is based on the 3' end of the PRRS  
 CC ORF3. The PCR product was used in the construction of homology vector 902  
 CC -49.14, which incorporates a beta-galactosidase marker gene and PPRS ORF3  
 CC flanked by raccopox virus (RPV) DNA, and was constructed for the  
 CC purpose of inserting foreign DNA into recombinant RPV. Recombinant RPVs  
 CC of the invention have foreign DNA inserted into non-essential regions of  
 CC the RPV genome. They can be included in vaccines against animal  
 CC pathogens, useful for immunising animals (especially avian species or  
 CC mammals, including humans) against animal pathogens (claimed), e.g.  
 CC feline pathogens (claimed) or human pathogens such as hepatitis B virus,  
 CC human immunodeficiency virus, human influenza etc. (Updated on 06-AUG-  
 CC 2003 to correct OS field.)  
 XX  
 SQ Sequence 30 BP; 5 A; 8 C; 12 G; 5 T; 0 U; 0 Other;

Query Match 1.2%; Score 23.6; DB 1; Length 30;  
 Best Local Similarity 86.7%; Pred. No. 31;  
 Matches 26; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 76 CCTCAGTCCGCGACGGCGATAGGACACC 105  
 |||||  
 Db 30 CCTCAGTCCGCGACGGCGATAGGATCCCC 1

RESULT 28  
 ADL61032  
 ID ADL61032 standard; DNA; 30 BP.  
 XX  
 AC ADL61032;  
 DT 20-MAY-2004 (first entry)  
 XX  
 DE Porcine Reproductive and Respiratory Syndrome Virus, PCR primer #22.  
 KW ss; primer; PCR; Virucide; Vaccine;  
 KW Porcine Reproductive and Respiratory Syndrome Virus; PRRSV;  
 KW Porcine Circovirus Type II; viral.  
 XX  
 OS Porcine reproductive and respiratory syndrome virus.

PN US2003138916-A1.  
 PD 24-JUL-2003.  
 XX  
 PF 16-JAN-2003; 2003US-00346004.  
 XX  
 PR 22-JAN-2002; 2002US-0351310P.  
 XX  
 PA (PROT-) PROTATEK INT INC.  
 XX  
 PI Yuan S, Ma S;  
 XX  
 DR WPI; 2003-851735/79.  
 XX  
 PT New isolated polynucleotide comprising an infectious cDNA encoding a  
 PT North American Porcine Reproductive and Respiratory Syndrome Virus  
 PT (PRRSV) RNA transcript, useful for preparing a vaccine against PRRSV  
 PT infection.  
 XX  
 PS Disclosure; SEQ ID NO 23; 34pp; English.

CC The invention relates to an isolated polynucleotide comprising an  
 CC infectious cDNA encoding a North American Porcine Reproductive and  
 CC Respiratory Syndrome Virus (PRRSV) RNA transcript. Also included are the  
 CC following: (1) a method of producing full-length infectious PRRSV cDNA;  
 CC (2) a method of producing infectious virus particles from an isolated  
 CC full-length infectious PRRSV cDNA clone; and (3) a composition comprising  
 CC the isolated polynucleotide or full-length infectious PRRSV cDNA. The  
 CC polynucleotide further comprises: at least one nucleotide deletion in at  
 CC least one of the 3' end of ORF7 and 5' end of 3' untranslated region; and  
 CC one or more mutations, where the mutation is non-silent mutation in ORF5

CC or ORF7. It encodes a porcine viral polypeptide, which is a capsid  
 CC protein of Porcine Circovirus Type II or its portion. The polynucleotide  
 CC is useful for preparing a vaccine against PRRSV infection. The present  
 CC sequence represents a primer used to construct full-length clones of cDNA  
 CC encoding a North American Porcine Reproductive and Respiratory Syndrome  
 CC Virus (PRRSV) RNA transcript.  
 XX  
 SQ Sequence 30 BP; 6 A; 10 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 1.2%; Score 23.6; DB 1; Length 30;  
 Best Local Similarity 86.7%; Pred. No. 31;  
 Matches 26; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 820 TGTCTCTGGCGCTACTCATGTACACAGATATA 849  
 |||||  
 Db 1 TGTCTCTGGCGCTACGGTGCCACAGATACA 30

RESULT 29  
 AAA27843/c  
 ID AAA27843 standard; DNA; 26 BP.  
 XX  
 AC AAA27843;  
 DT 06-AUG-2003 (revised)  
 DT 12-SEP-2000 (first entry)  
 XX  
 DE North American PRRS virus ORF1b-ORF2-based PCR primer.  
 XX  
 KW North American PRRS virus; Nidovirales virus; pig; swine; vaccine;  
 KW PCR primer; ss.  
 XX  
 OS Porcine reproductive and respiratory syndrome virus.

PN BP1018557-A2.  
 PD 12-JUL-2000.  
 XX  
 PF 25-NOV-1999; 99EP-00309409.  
 XX  
 PR 22-DEC-1998; 98US-0113345P.  
 XX  
 PA (PFIZ ) PFIZER PROD INC.  
 XX  
 PI Calvert JG, Welch SM, Sheppard MG;  
 XX  
 DR WPI; 2000-444364/39.

XX New polynucleotide encoding an infectious RNA molecule of a North  
 PT American porcine reproductive and respiratory syndrome virus for use as a  
 PT vaccine in protecting swine and other animals from infection by a  
 PT pathogen.

PS Example 6; Page 23; 53pp; English.

CC The present sequence is that of a primer used for synthesizing the  
 CC downstream flanking region to an insertion site between ORF1b and ORF2 of  
 CC the North American porcine reproductive and respiratory syndrome (PRRS)  
 CC virus P129A (see AAA27809). The primer binds to nucleotides 13819-13844  
 CC in ORF5. A replication-competent PRRS virus was constructed for use as a  
 CC vector for expression of foreign genes. The invention relates to  
 CC polynucleotide molecules, plasmids, viral vectors and transfected host  
 CC cells that comprise North American PRRS DNA. It also relates to  
 CC polynucleotide molecules, viral vectors and transfected host cells  
 CC encoding a genetically modified North American PRRS virus that encodes 1  
 CC or more heterologous antigenic epitopes, for use as a vaccine. (Updated  
 CC on 06-AUG-2003 to correct OS field.)  
 XX

SQ Sequence 26 BP; 13 A; 8 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 1.1%; Score 22.8; DB 1; Length 26;  
 Best Local Similarity 92.3%; Pred. No. 30;  
 Matches 24; Conservative 0; Mismatches 2; Indels 0; Gaps 0;



```
PD 12-NOV-1998.
XX
XX PF 05-MAY-1998; 98MO-NL000251.
XX
XX PR 06-MAY-1997; 97EP-00201343.
XX
XX PA (DIER-) STICHTING INST DIERHOUDERIJ EN DIERGEZON.
XX
XX PI Van Nieuwstadt AP, Langeveld J, Meulenberg J;
XX
XX DR WPI; 1999-070090/06.
XX
XX PT New peptides containing epitopes of porcine reproductive and respiratory
PT syndrome virus - useful in vaccines and for diagnostic tests,
PT particularly for differentiating between infected and vaccinated animals.
XX
XX PS Disclosure; Page 28; 46pp; English.
XX
XX CC PCR primers AAV99412-20 were used to amplify open reading frame 4 (ORF4)
CC of Porcine reproductive and respiratory syndrome virus (PRRSV), in the
CC course of the invention. ORF4 encodes GP4 protein, from which antigenic
CC peptides can be derived. The peptides are able to elicit neutralising
CC antibodies. Such antigenic peptides are used in vaccines to protect pigs
CC against PRRSV infection, thus reducing the occurrence of PRRSV in pig
CC herds and aiding in its eradication. The peptides may also be used
CC diagnostically for detection of PRRSV-specific antibodies, i.e. to
CC infect animals and to distinguish between different PRRSV isolates.
CC Synthetic antibodies are used to detect antigens containing the epitopes
CC present in the peptides
XX
XX SQ Sequence 30 BP; 6 A; 9 C; 8 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 22.6; DB 1; Length 30;
XX Best Local Similarity 86.2%; Pred. No. 43;
XX Matches 25; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 434 GAAATGCTTGACCGGGGCTGTGCTGCG 462
XX |||||
XX 29 GAAATGCTTGACCGGGGAGCTTGCTGCG 1
XX
XX RESULT 33
XX AAQ63573/c
XX ID AAQ63573 standard; DNA; 22 BP.
XX
XX AC AAQ63573;
XX
XX XX 25-MAR-2003 (revised)
XX DT 09-DEC-1994 (first entry)
XX
XX DE PCR primer PP284.
XX
XX KW Primer; polymerase chain reaction; PCR; amplify; probe; Iowa strain;
XX infectious agent; porcine respiratory and reproductive syndrome; ISU-12;
XX KW vaccine; porcine respiratory and reproductive disease; PRRD; antibody;
XX assay; ss.
XX
XX OS Synthetic.
XX
XX XX EP595436-A2.
XX PN 04-MAY-1994.
XX
XX XX 29-OCT-1993; 93EP-00203042.
XX PF
XX XX 30-OCT-1992; 92US-00969071.
XX PR 05-OCT-1993; 93US-00131625.
XX
XX PA (SOLV ) SOLVAY ANIMAL HEALTH INC.
XX (IOWA ) UNIV IOWA STATE RES FOUND INC.
XX
XX PI Paul PS, Halbur PG, Meng X, Lum MA, Lyoo YS;
XX
XX DR WPI; 1994-146025/18.
XX
XX PT New porcine respiratory and reproductive disease virus - used to prepare
XX vaccines and antibodies for diagnosis, treatment and prophylaxis of virus
XX infection.
XX
XX PS Example 3; Page 24; 98pp; English.
XX
XX CC The sequences given in AAQ63573-79 are primers which were used in the
XX amplification of probes for the isolation of the 3' terminal region of
XX the infectious agent associated with the Iowa strain of porcine
XX respiratory and reproductive syndrome, termed ISU-12. The vaccine of the
XX sequence may be used to infect cells and from these, the vaccine of the
XX invention can be produced. This vaccine may be used for protecting pigs
XX against a porcine respiratory and reproductive disease (PRRD). Antibodies
XX to the vaccine may also be used in treating PRRD and for assaying for the
XX virus. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX SQ Sequence 22 BP; 2 A; 7 C; 7 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 22; DB 1; Length 22;
XX Best Local Similarity 100.0%; Pred. No. 27;
XX Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2023 ATTGGCGAGAACCCACACGGCGG 2044
XX |||||
XX 22 ATTGGCGAGAACCCACACGGCGG 1
XX
XX Db
XX
XX RESULT 34
XX AAQ63574
XX ID AAQ63574 standard; DNA; 22 BP.
XX
XX AC AAQ63574;
XX
XX XX 25-MAR-2003 (revised)
XX DT 12-DEC-1994 (first entry)
XX
XX DE PCR primer PP285.
XX
XX KW Primer; polymerase chain reaction; PCR; amplify; probe; Iowa strain;
XX infectious agent; porcine respiratory and reproductive syndrome; ISU-12;
XX KW vaccine; porcine respiratory and reproductive disease; PRRD; antibody;
XX assay; ss.
XX
XX OS Synthetic.
XX
XX XX EP595436-A2.
XX PN 04-MAY-1994.
XX
XX XX 29-OCT-1993; 93EP-00203042.
XX PF
XX XX 30-OCT-1992; 92US-00969071.
XX PR 05-OCT-1993; 93US-00131625.
XX
XX PA (SOLV ) SOLVAY ANIMAL HEALTH INC.
XX (IOWA ) UNIV IOWA STATE RES FOUND INC.
XX
XX PI Paul PS, Halbur PG, Meng X, Lum MA, Lyoo YS;
XX
XX DR WPI; 1994-146025/18.
XX
XX PT New porcine respiratory and reproductive disease virus - used to prepare
XX vaccines and antibodies for diagnosis, treatment and prophylaxis of virus
XX infection.
XX
XX PS Example 3; Page 24; 98pp; English.
XX
XX CC The sequences given in AAQ63573-79 are primers which were used in the
XX amplification of probes for the isolation of the 3' terminal region of
XX the infectious agent associated with the Iowa strain of porcine
```



KW subgenomic mRNA; glycosylated membrane protein; nucleocapsid protein;  
KW membrane associated protein; vaccine; antibody; therapy; primer; amplify;  
KW polymerase chain reaction; PCR; ss.  
XX Synthetic.  
OS

XX WO9640932-A1.  
PN

XX 19-DEC-1996.  
PD

XX 07-JUN-1996; 96WO-US008962.  
PF

XX 07-JUN-1995; 95US-00478316.  
PR

XX (PAUL/) PAUL P S.  
PA

XX (MENG/) MENG X.  
PA

XX (HALB/) HALBUR P.  
PA

XX (MORO/) MOROZOV I.  
PA

XX Paul PS, Meng X, Halbur P, Morozov I;  
PI

XX WPI; 1997-108646/10.  
DR

XX Porcine reproductive and respiratory syndrome virus DNA sequences -  
PT useful for diagnosis, treatment and prevention of infection in pigs.  
PT

XX Example 2; Page 81; 114pp; English.  
PS

XX AAT79997-T80016 represent amplification primers for ORFs 1b-7 of porcine  
CC reproductive and respiratory syndrome virus (PRRSV). The amplified  
CC sequences can be used in the polynucleotides of the invention. PRRSV is a  
CC new and severe disease in swine, characterised by reproductive failure in  
CC sows and gilts, pneumonia in young growing pigs, and an increase in  
CC preweaning mortality. However, there are marked differences in  
CC pathogenicity between isolates (with ISU3927 being the least virulent  
CC isolate known). The genomic organisation of PRRSV resembles coronaviruses  
CC and toroviruses, in that their replication involves the formation of a 3',  
CC -coterminated nested set of subgenomic mRNAs. ORFs 5, 6, and 7 encode a  
CC nucleocapsid protein, respectively. ORFs 2 to 4 encode proteins with the  
CC characteristics of membrane associated proteins. The polynucleotides of  
CC the invention, encode a protein that is at least 88%, but less than 100%  
CC homologous to one of proteins encoded by one of the ORFs of these  
CC sequences. The polynucleotides of the invention, and their encoded  
CC polypeptides can be used in a vaccine to protect a pig against PRRSV.  
CC Antibodies raised against the polypeptides can be used to treat a pig  
CC suffering from PRRSV, and to assay for a PRRSV  
XX

SQ Sequence 22 BP; 2 A; 7 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 1.1%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 27;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2023 ATTGGCGAGAACACACGCGCG 2044

DB 22 ATTGGCGAGAACACACGCGCG 1  
|||||

RESULT 38

AAT80009

ID AAT80009 standard; DNA; 22 BP.

XX AAT80009;

XX 24-OCT-1997 (first entry)

XX Primer PP285 for ORFs 1b-7 of PRRSV.

XX Porcine reproductive and respiratory syndrome virus; PRRSV; coronavirus;  
XX reproductive failure; pneumonia; pig; preweaning mortality; torovirus;  
KW subgenomic mRNA; glycosylated membrane protein; nucleocapsid protein;  
KW membrane associated protein; vaccine; antibody; therapy; primer; amplify;  
KW

KW polymerase chain reaction; PCR; ss.

OS Synthetic.  
XX

XX WO9640932-A1.  
PN

XX 19-DEC-1996.  
PD

XX 07-JUN-1996; 96WO-US008962.  
PF

XX 07-JUN-1995; 95US-00478316.  
PR

XX (PAUL/) PAUL P S.  
PA

XX (MENG/) MENG X.  
PA

XX (HALB/) HALBUR P.  
PA

XX (MORO/) MOROZOV I.  
PA

XX Paul PS, Meng X, Halbur P, Morozov I;  
PI

XX WPI; 1997-108646/10.  
DR

XX Porcine reproductive and respiratory syndrome virus DNA sequences -  
PT useful for diagnosis, treatment and prevention of infection in pigs.  
PT

XX Example 2; Page 81; 114pp; English.  
PS

XX AAT79997-T80016 represent amplification primers for ORFs 1b-7 of porcine  
CC reproductive and respiratory syndrome virus (PRRSV). The amplified  
CC sequences can be used in the polynucleotides of the invention. PRRSV is a  
CC new and severe disease in swine, characterised by reproductive failure in  
CC sows and gilts, pneumonia in young growing pigs, and an increase in  
CC preweaning mortality. However, there are marked differences in  
CC pathogenicity between isolates (with ISU3927 being the least virulent  
CC isolate known). The genomic organisation of PRRSV resembles coronaviruses  
CC and toroviruses, in that their replication involves the formation of a 3',  
CC -coterminated nested set of subgenomic mRNAs. ORFs 5, 6, and 7 encode a  
CC nucleocapsid protein, respectively. ORFs 2 to 4 encode proteins with the  
CC characteristics of membrane associated proteins. The polynucleotides of  
CC the invention, encode a protein that is at least 88%, but less than 100%  
CC homologous to one of proteins encoded by one of the ORFs of these  
CC sequences. The polynucleotides of the invention, and their encoded  
CC polypeptides can be used in a vaccine to protect a pig against PRRSV.  
CC Antibodies raised against the polypeptides can be used to treat a pig  
CC suffering from PRRSV, and to assay for a PRRSV  
XX

SQ Sequence 22 BP; 3 A; 10 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 1.1%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 27;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1693 CCCCATTTCCCTCTAGCGACTG 1704

DB 1 CCCCATTTCCCTCTAGCGACTG 22  
|||||

RESULT 39

ADG14071

ID ADG14071 standard; DNA; 22 BP.

XX ADG14071;

XX 26-FEB-2004 (first entry)

XX Porcine reproductive and respiratory syndrome virus PCR primer 38.

XX Porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;  
KW immunoprotective; vaccine; ISU-55;  
KW porcine reproductive and respiratory disease; PCR; primer; ss.  
XX Porcine reproductive and respiratory syndrome virus.  
OS



CC epitopes, for use as a vaccine. (Updated on 06-AUG-2003 to correct OS  
field.)

SQ Sequence 22 BP; 5 A; 10 C; 4 G; 3 T; 0 U; 0 Other;  
Query Match 1.1%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 27;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1872 CCGGTCACAGCATCACCCTCAG 1893  
DB 1 CCGGTCACAGCATCACCCTCAG 22

RESULT 42  
AAV60655  
ID AAV60655 standard; DNA; 21 BP.  
XX AC AAV60655;  
XX AC AAV60655;  
DT 06-JAN-1999 (first entry)  
XX PRRSV isolate Canada 14/96 nucleocapsid gene sense primer.  
DE Nucleocapsid; Porcine Reproductive and Respiratory Syndrome Virus; PRRSV;  
KW pig; serum; RT-PCR; Reverse transcription; amplification; fusion protein;  
KW primer; bacteriophage T7; gene 10; E. coli; immunoassay; diagnosis; ss.  
XX Synthetic.  
OS Porcine reproductive and respiratory syndrome virus.  
XX Porcine reproductive and respiratory syndrome virus.  
PN WO9829550-A1.  
XX 09-JUL-1998.  
PD 24-DEC-1997; 97WO-ES000313.  
XX 30-DEC-1996; 96ES-00002770.  
XX (INMU-) IMMUNOLOGIA & GENETICA APLICADA SA.  
PA Rodriguez Garcia MJ, Sanz Fernandez A, Casal Alvarez JI;  
XX WPI; 1998-388131/33.  
DR New fusion proteins comprising Porcine Reproductive and Respiratory  
PT Syndrome Virus nucleocapsid - useful as reagents in immuno:diagnosis of  
PT PRRS, are produced recombinantly in bacterial hosts.  
XX Example 3; Page 28; 42pp; Spanish.

XX Primers AAV60555-V60556 were used to RT-PCR amplify the coding sequence  
CC for the nucleocapsid protein from the Porcine Reproductive and  
CC Respiratory Syndrome Virus (PRRSV) American isolate Canada 14/96  
CC (AAW68457). The coding sequence was isolated from viral RNA obtained from  
CC the serum of a pig infected with the Canada 14/96 isolate. The open  
CC reading frame obtained by sequencing the fragment encodes a 123 amino  
CC acid sequence. The insert sequence was subsequently cloned into the  
CC bacterial expression vector pET3x to produce a fusion protein (AAW68459)  
CC comprising the PRRSV nucleocapsid protein and the bacteriophage T7 gene  
CC 10 protein when expressed in E. coli (BL21) pLys cells. The nucleocapsid  
CC protein, and especially the fusion protein, is useful as a reagent in  
CC immunoassays to diagnose PRRSV  
XX Sequence 21 BP; 10 A; 5 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 1.0%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 33;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1522 TAAATATGCCAATAACACCG 1542  
DB 1 TAAATATGCCAATAACACCG 21

RESULT 43  
AAC81765/c  
ID AAC81765 standard; DNA; 21 BP.  
XX AAC81765;  
XX AAC81765;  
DT 23-FEB-2001 (first entry)  
XX Porcine Lelystad virus JA-142 PCR primer #1.  
DE Porcine reproductive and respiratory syndrome virus; PRRSV; vaccine; pig;  
KW attenuated virus; PCR primer; ss.  
XX Lelystad virus.  
OS WO200065032-A1.  
XX 02-NOV-2000.  
XX 21-APR-2000; 2000WO-US010852.  
XX 22-APR-1999; 99US-00298110.  
PR 15-DEC-1999; 99US-00461879.  
XX (USDA ) US SEC OF AGRIC.  
XX Mengeling WL, Vorwald A, Lager K, Roof M, Burkhardt K, Gorcyca DE;  
PI WPI; 2000-687328/67.  
XX Passing viruses to attenuation comprises maintaining virus in  
PT logarithmic phase of replication throughout multiple cell culture  
PT passages, useful for protection against atypical porcine reproductive and  
PT respiratory syndrome virus.  
XX Example 7; Page 48; 70pp; English.  
XX The present invention provides a novel method of producing attenuated  
CC versions of viruses, using multiple passage through cell cultures and  
CC involving the removal of samples of the virus prior to the induction of  
CC cytopathic effects. The sample is then inoculated into the next cell  
CC culture. The sequence of the naturally-occurring Lelystad virus (also  
CC known as the porcine reproductive and respiratory syndrome virus or  
CC PRRSV) atypical strain JA-142 is provided, along with that of a modified  
CC version of the virus. The modified version can be used in the vaccination  
CC of pigs against the Lelystad virus  
XX Sequence 21 BP; 6 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 1.0%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 33;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1981 GTCACCTATTCATTTAGGCGC 2001  
DB 21 GTCACCTATTCATTTAGGCGC 1  
RESULT 44  
ADM36186/c  
ID ADM36186 standard; DNA; 21 BP.  
XX ADM36186;  
XX ADM36186;  
DT 03-JUN-2004 (first entry)  
XX Attenuated PRRS virus PCR primer #1.  
DE virucide; vaccine; Porcine reproductive and respiratory syndrome virus;  
XX PRRSV; multi-passage; virus attenuation; virus replication;  
KW logarithmic replication; cytopathic effect; reproductive failure;



KW strain detection; atypical PRRS virus strain; PCR, primer; ss.  
 XX Porcine reproductive and respiratory syndrome virus.  
 OS US2003119170-A1.  
 XX 26-JUN-2003.  
 XX 18-OCT-2001; 2001US-00981282.  
 XX 22-APR-1999; 99US-00298110.  
 PR 15-DEC-1999; 99US-00461879.  
 XX (MENG/) MENGELING W L.  
 PA (VORW/) VORWALD A.  
 PA (LAGE/) LAGER K.  
 PA (BURK/) BURKHART K.  
 PA (GORC/) GORCYCA D E.  
 PA (ROOF/) ROOF M.  
 XX Mengeling WL, Vorwald A, Lager K, Burkhardt K, Gorcyca DE, Roof M;  
 PI WPI; 2003-863440/80.  
 XX Multi-passage method for attenuating a virus by removing virus-containing  
 PT samples from the certain cell cultures and inoculating the next  
 PT respective cell culture passages with the samples.  
 XX Example 7; Page 15; 50pp; English.  
 XX The invention describes a multi-passage method for attenuating a virus  
 CC comprising successively replicating the virus through inoculation and  
 CC replication of the virus in respective individual cell cultures until  
 CC attenuation is achieved. The improvement comprises removing virus-  
 CC containing samples from the certain cell cultures while the virus is  
 CC replicating at a logarithmic rate and prior to induction of cytopathic  
 CC effects in the certain cell cultures and inoculating the next respective  
 CC cell culture passages with the samples. Also described are: a porcine  
 CC reproductive and respiratory syndrome (PRRS) virus having ATCC Accession  
 CC Number VR-2638; a vaccine comprising the virus; a method of immunis-  
 CC ing swine against PRRS; an isolated DNA sequence having at least about 65 or  
 CC 75% identity with a fully defined sequence having 15424 bp; a method of  
 CC identifying attenuated strains of PRRSV, having RNA that is cleaved into  
 CC known fragment numbers or lengths after cleavage by a restriction enzyme;  
 CC a method of reducing reproductive failure in swine; and a method of  
 CC differentiating between strains of PRRSV. The multi-passage method for  
 CC attenuating a virus is useful for preparing a vaccine against atypical  
 CC PRRS virus strains. This sequence represents a primer used to isolate DNA  
 CC encoding an attenuated PRRS virus.  
 XX  
 SQ Sequence 21 BP; 6 A; 5 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 1.0%; Score 21; DB 1; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 33;  
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1981 GTCACTTATTCATTAGGGCG 2001  
 Db 21 GTCACTTATTCATTAGGGCG 1  
 RESULT 45  
 ADM96472/c  
 ID ADM96472 standard; DNA; 21 BP.  
 XX  
 AC ADM96472;  
 XX  
 DT 29-JUL-2004 (first entry)  
 XX Porcine reproductive and respiratory syndrome virus, primer #1.  
 DE Virucide; Vaccine; ss;  
 XX porcine reproductive and respiratory syndrome virus; PRRSV; swine;  
 KW

KW vaccine; reproductive failure; respiratory failure; RespPRRS/Repro;  
 KW JA-142; viral; primer; PCR.  
 XX Porcine reproductive and respiratory syndrome virus.  
 OS US2004087002-A1.  
 XX 06-MAY-2004.  
 XX 03-SEP-2003; 2003US-00654545.  
 XX 22-APR-1999; 99US-00298110.  
 PR 15-DEC-1999; 99US-00461879.  
 PR 18-OCT-2001; 2001US-00981282.  
 XX (MENG/) MENGELING W L.  
 PA (VORW/) VORWALD A.  
 PA (LAGE/) LAGER K.  
 PA (BURK/) BURKHART K.  
 PA (GORC/) GORCYCA D E.  
 PA (ROOF/) ROOF M.  
 XX Mengeling WL, Vorwald A, Lager K, Burkhardt K, Gorcyca DE, Roof M;  
 PI WPI; 2004-356206/33.  
 XX New virus attenuated by a multiple-passage attenuation method, useful for  
 PT eliciting antibody response specific for porcine reproductive and  
 PT respiratory syndrome virus strains in swine.  
 XX Example 7; Page 16; 50pp; English.  
 XX The invention relates to a virus attenuated by a multiple-passage  
 CC attenuation method, and which is capable of eliciting antibody response  
 CC specific for porcine reproductive and respiratory syndrome virus (PRRSV)  
 CC strains in swine. Also described are the following: (i) a vaccine  
 CC comprising the virus; (ii) a method of differentiating between attenuated  
 CC and virulent strains of PRRSV having RNA that is cleaved into known  
 CC fragment numbers or lengths after cleavage by a restriction enzyme,  
 CC depending upon whether the strain is attenuated or virulent; (iii) an  
 CC attenuated PRRSV strain having N+1 fragments after digestion by a  
 CC restriction enzyme, where strains having N fragments after digestion by  
 CC the restriction enzyme are not attenuated; (iv) a method of reducing  
 CC reproductive and/or respiratory failure in swine by providing the  
 CC vaccine, and administering the vaccine to the swine. The virus is  
 CC attenuated by a multiple-passage attenuation method comprising  
 CC successively replicating the virus through inoculation and replication of  
 CC the virus in respective individual cell cultures until attenuation is  
 CC achieved; and inoculating the next respective cell culture passages with  
 CC the sample. The successive replication includes removing virus-containing  
 CC samples from at least certain of the cell cultures while the virus is  
 CC replicating at a logarithmic rate and prior to induction of cytopathic  
 CC effects in the certain cell cultures. The virus is substantially  
 CC avirulent and having been passaged a minimum of 200 times in cell  
 CC culture. In reducing reproductive and/or respiratory failure in swine,  
 CC the strain is selected from RespPRRS/Repro, and/or JA-142. The virus is  
 CC useful as a vaccine for eliciting specific antibody response for porcine  
 CC reproductive and respiratory syndrome virus strains in swine. The present  
 CC sequence represents a PCR primer used to isolate the PRRSV genomic DNA  
 CC sequence.  
 XX  
 SQ Sequence 21 BP; 6 A; 5 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 1.0%; Score 21; DB 1; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 33;  
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1981 GTCACTTATTCATTAGGGCG 2001  
 Db 21 GTCACTTATTCATTAGGGCG 1  
 RESULT 46

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AAL49205
ID AAL49205 standard; DNA; 22 BP.
XX
AC AAL49205;
XX
DT 30-OCT-2002 (first entry)
XX
DE PRRSV RNA PCR primer #1.
XX
KW CD 151; porcine reproductive and respiratory syndrome virus; PRRSV; pig;
KW selective breeding; xenotransplant; anti-RNA entry protein; anti-REP;
KW anti-viral; vaccine; PCR; primer; ss.
XX
OS Porcine reproductive and respiratory syndrome virus.
XX
PN WO200260924-A2.
XX
PD 08-AUG-2002.
XX
PF 29-JAN-2002; 2002WO-US002868.
XX
PR 29-JAN-2001; 2001US-00772044.
PR 28-JAN-2002; 2002US-00772044.
XX
PA (UNIV ) UNIV KANSAS STATE RES FOUND.
XX
PI Kapil S, Shanmukhappa K;
XX
DR WPI; 2002-619225/66.
XX
PT Determining susceptibility and resistance to porcine reproductive and
PT respiratory syndrome virus (PRRSV), useful for improving swine breeding,
PT by assaying for CD 151 in a sample of cellular material of known origin
PT from the animal.
XX
PS Example 1; Page 19; 77bp + Sequence Listing; English.
XX
CC The present invention relates to a method of determining the
CC susceptibility or resistance of an animal to porcine reproductive and
CC respiratory syndrome virus (PRRSV). This involves assaying for CD 151 in
CC a sample of cellular material of known origin from the animal. In
CC addition, coding sequences of CD 151 are described, and anti-viral
CC compounds designated anti-RNA entry proteins (anti-REPs). The method is
CC useful for determining susceptibility and resistance to PRRSV in an
CC animal. This is particularly useful for improving swine breeding or for
CC screening different pig breeding lines. The method is also useful for
CC developing non-simian recombinant cell lines for propagating the virus,
CC for producing anti-viral compounds or vaccines for inducing immunity
CC against PRRSV, and for diagnosing PRRSV infection in a swine. The present
CC sequence is a PCR primer used to amplify the PRRSV RNA. Note: The
CC sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 22 BP; 3 A; 9 C; 3 G; 7 T; 0 U; 0 Other;
Query Match 1.0%; Score 20.4; DB 1; Length 22;
Best Local Similarity 95.5%; Pred. No. 45;
Matches 21; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1683 CCCCATTTCCCTCTAGCGACTG 1704
DB 1 CCCCATTTCCCTCTAGCGACTG 22
RESULT 47
ID ADE39755
XX ADE39755 standard; DNA; 22 BP.
AC ADE39755;
XX
XX 29-JAN-2004 (first entry)
XX

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DE Porcine CD 151 RT-PCR primer seq id 31.
XX
KW porcine reproductive and respiratory syndrome virus; PRRSV;
KW susceptibility; CD 151; susceptibility standard; PRRSV infection;
KW vaccine; vaccine virus stock; non-simian vaccine; xenotransplantation;
KW non-simian cell line; drug testing; transformed cell line; porcine; pig;
KW reverse transcriptase PCR; RT-PCR; primer; ss.
XX
OS Sus sp.
XX
PN US2003186236-A1.
XX
PD 02-OCT-2003.
XX
PF 28-JAN-2002; 2002US-00058597.
XX
PR 29-JAN-2001; 2001US-00772044.
XX
PA (KAPI/) KAPIL S.
PA (SHAN/) SHANMUKHAPPA K.
XX
PI Kapil S, Shanmukhappa K;
XX
DR WPI; 2003-811729/76.
XX
PT Determination of susceptibility to porcine reproductive and respiratory
PT syndrome virus non-invasively useful e.g. to breed pigs with low
PT susceptibility or classify infection resistance in an animal, by assaying
PT for CD 151.
XX
PS Example 1; SEQ ID NO 31; 45pp; English.
XX
CC The invention describes a method to identify susceptibility to porcine
CC reproductive and respiratory syndrome virus (PRRSV) in an animal by
CC assaying a cellular material sample from known origin in the animal for
CC CD 151. The method is useful to determine the susceptibility of animals
CC (especially pigs) to PRRSV and to compare susceptibility to a known
CC susceptibility standard, especially for material of the same cellular
CC origin. It can be used to determine if an animal is resistant to PRRSV
CC infection, by determining presence/absence of CD 151, and to classify
CC resistance levels. It is especially useful to select animals for
CC breeding, by selecting animals with CD 151 levels lower (especially a
CC least 50 % lower) than a known standard (especially for material of the
CC same cellular origin). Polynucleotides encoding CD 151 are useful to
CC produce vaccines and to modify PRRSV production in cells susceptible to
CC PRRSV infection, especially to increase PRRSV production e.g. in vaccine
CC virus stock. They are especially useful to produce non-simian vaccines,
CC avoiding possible introduction of primate viruses into organs
CC xenotransplanted from pigs to humans. They may be used to determine the
CC effect of single nucleotide polymorphisms on PRRSV susceptibility, and to
CC compare PRRSV susceptibility factors between individual swine. They can
CC also be used to modulate viral RNA (especially PRRSV RNA) entry into
CC cells by altering CD 151 amounts in cells. Polynucleotides may be
CC included in plasmids useful to render a cell line susceptible to PRRSV
CC infection, useful to produce non-simian lines for drug testing. They may
CC be included in vectors and used to integrate CD 151 into a chromosome.
CC They can also be used to produce transformed cell lines, useful e.g. to
CC diagnose PRRSV infection in swine herds or produce vaccines for inducing
CC immunity against PRRSV. This sequence represents a primer used to isolate
CC DNA encoding porcine CD 151.
XX
SQ Sequence 22 BP; 3 A; 9 C; 3 G; 7 T; 0 U; 0 Other;
Query Match 1.0%; Score 20.4; DB 1; Length 22;
Best Local Similarity 95.5%; Pred. No. 45;
Matches 21; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1683 CCCCATTTCCCTCTAGCGACTG 1704
DB 1 CCCCATTTCCCTCTAGCGACTG 22
RESULT 48

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AAQ63577/C
ID AAQ63577 standard; DNA; 20 BP.
XX
AC AAQ63577;
XX
AC AC
XX
DT 25-MAR-2003 (revised)
DT 12-DEC-1994 (first entry)
XX
XX PCR primer PP288.
DE
XX
XX Primer; polymerase chain reaction; PCR; amplify; probe; Iowa strain;
KW infectious agent; porcine respiratory and reproductive syndrome; ISU-12;
KW vaccine; porcine respiratory and reproductive disease; PRRD; antibody;
KW assay; ss.
XX
XX Synthetic.
XX
XX EP595436-A2.
XX
PD 04-MAY-1994.
XX
XX 29-OCT-1993; 93EP-00203042.
XX
XX 30-OCT-1992; 92US-00969071.
PR
PR 05-OCT-1993; 93US-00131625.
XX
XX (SOLV ) SOLVAY ANIMAL HEALTH INC.
PA (IOWA ) UNIV IOWA STATE RES FOUND INC.
XX
XX Paul PS, Halbur PG, Meng X, Lum MA, Lyoo YS;
XX WPI; 1994-146025/18.
XX
XX 29-OCT-1993; 93EP-00203042.
XX
XX 30-OCT-1992; 92US-00969071.
PR
PR 05-OCT-1993; 93US-00131625.
XX
XX (SOLV ) SOLVAY ANIMAL HEALTH INC.
PA (IOWA ) UNIV IOWA STATE RES FOUND INC.
XX
XX Paul PS, Halbur PG, Meng X, Lum MA, Lyoo YS;
XX WPI; 1994-146025/18.
XX
XX New porcine respiratory and reproductive disease virus - used to prepare
PT vaccines and antibodies for diagnosis, treatment and prophylaxis of virus
PT infection.
XX
XX Example 3; Page 24; 98pp; English.
XX
XX The sequences given in AAQ63573-79 are primers which were used in the
CC amplification of probes for the isolation of the 3' terminal region of
CC the infectious agent associated with the Iowa strain of porcine
CC respiratory and reproductive syndrome, termed ISU-12. The isolated ISU-12
CC sequence may be used to infect cells and from these, the vaccine of the
CC invention can be produced. This vaccine may be used for protecting pigs
CC against a porcine respiratory and reproductive disease (PRRD). Antibodies
CC to the vaccine may also be used in treating PRRD and for assaying for the
CC virus. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;
XX
XX The sequences given in AAQ63573-79 are primers which were used in the
CC amplification of probes for the isolation of the 3' terminal region of
CC the infectious agent associated with the Iowa strain of porcine
CC respiratory and reproductive syndrome, termed ISU-12. The isolated ISU-12
CC sequence may be used to infect cells and from these, the vaccine of the
CC invention can be produced. This vaccine may be used for protecting pigs
CC against a porcine respiratory and reproductive disease (PRRD). Antibodies
CC to the vaccine may also be used in treating PRRD and for assaying for the
CC virus. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1752 CTGTCGTCATCCAGACCGC 1771
Db 20 CTGTCGTCATCCAGACCGC 1
XX
RESULT 49
AAQ63576
ID AAQ63576 standard; DNA; 20 BP.
XX
AC AAQ63576;
XX
XX 25-MAR-2003 (revised)
DT 12-DEC-1994 (first entry)
XX
XX PCR primer PP287.
DE
XX
XX Primer; polymerase chain reaction; PCR; amplify; probe; Iowa strain;
KW infectious agent; porcine respiratory and reproductive syndrome; ISU-12;
KW vaccine; porcine respiratory and reproductive disease; PRRD; antibody;
XX
XX Synthetic.
XX
XX EP595436-A2.
XX
PD 04-MAY-1994.
XX
XX 29-OCT-1993; 93EP-00203042.
XX
XX 30-OCT-1992; 92US-00969071.
PR
PR 05-OCT-1993; 93US-00131625.
XX
XX (SOLV ) SOLVAY ANIMAL HEALTH INC.
PA (IOWA ) UNIV IOWA STATE RES FOUND INC.
XX
XX Paul PS, Halbur PG, Meng X, Lum MA, Lyoo YS;
XX WPI; 1994-146025/18.
XX
XX New porcine respiratory and reproductive disease virus - used to prepare
PT vaccines and antibodies for diagnosis, treatment and prophylaxis of virus
PT infection.
XX
XX Example 3; Page 24; 98pp; English.
XX
XX The sequences given in AAQ63573-79 are primers which were used in the
CC amplification of probes for the isolation of the 3' terminal region of
CC the infectious agent associated with the Iowa strain of porcine
CC respiratory and reproductive syndrome, termed ISU-12. The isolated ISU-12
CC sequence may be used to infect cells and from these, the vaccine of the
CC invention can be produced. This vaccine may be used for protecting pigs
CC against a porcine respiratory and reproductive disease (PRRD). Antibodies
CC to the vaccine may also be used in treating PRRD and for assaying for the
CC virus. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 554 CAACTTGACGCTATGTGAGC 573
Db 1 CAACTTGACGCTATGTGAGC 20
XX
RESULT 50
AAQ63578
ID AAQ63578 standard; DNA; 20 BP.
XX
AC AAQ63578;
XX
XX 25-MAR-2003 (revised)
DT 12-DEC-1994 (first entry)
XX
XX PCR primer PP289.
DE
XX
XX Primer; polymerase chain reaction; PCR; amplify; probe; Iowa strain;
KW infectious agent; porcine respiratory and reproductive syndrome; ISU-12;
KW vaccine; porcine respiratory and reproductive disease; PRRD; antibody;
XX
XX Synthetic.
XX
XX EP595436-A2.
XX
PD 04-MAY-1994.
XX
XX 29-OCT-1993; 93EP-00203042.
XX
XX 30-OCT-1992; 92US-00969071.
PR

```

```
PR 05-OCT-1993; 93US-00131625.
XX
XX (SOLV ) SOLVAY ANIMAL HEALTH INC.
PA (IOWA ) UNIV IOWA STATE RES FOUND INC.
XX
XX Paul PS, Halbur PG, Meng X, Lum MA, Lyoo YS;
XX WPI; 1994-146025/18.
XX
XX New porcine respiratory and reproductive disease virus - used to prepare
PT vaccines and antibodies for diagnosis, treatment and prophylaxis of virus
PT infection.
XX
XX Example 3; Page 24; 98pp; English.
XX
XX The sequences given in AAQ63573-79 are primers which were used in the
CC amplification of probes for the isolation of the 3' terminal region of
CC the infectious agent associated with the Iowa strain of porcine
CC respiratory and reproductive syndrome, termed ISU-12. The isolated ISU-12
CC sequence may be used to infect cells and from these, the vaccine of the
CC invention can be produced. This vaccine may be used for protecting pigs
CC against a porcine respiratory and reproductive disease (PRRD). Antibodies
CC to the vaccine may also be used in treating PRRD and for assaying for the
CC virus. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 1.0%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 41;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1131 GACTGCTAGGCTTCGAC 1150
XX 1 GACTGCTAGGCTTCGAC 20
XX
XX RESULT 51
XX AAQ63579/c
XX ID AAQ63579 standard; DNA; 20 BP.
XX
XX AC AAQ63579;
XX
XX 25-MAR-2003 (revised)
XX 12-DEC-1994 (first entry)
XX
XX PCR primer PP386.
XX
XX Primer; polymerase chain reaction; PCR; amplify; probe; Iowa strain;
XX infectious agent; porcine respiratory and reproductive syndrome; ISU-12;
XX vaccine; porcine respiratory and reproductive disease; PRRD; antibody;
XX assay; ss.
XX
XX Synthetic.
XX
XX EP595436-A2.
XX
XX 04-MAY-1994.
XX
XX 29-OCT-1993; 93EP-00203042.
XX
XX 30-OCT-1992; 92US-00969071.
XX 05-OCT-1993; 93US-00131625.
XX
XX (SOLV ) SOLVAY ANIMAL HEALTH INC.
XX (IOWA ) UNIV IOWA STATE RES FOUND INC.
XX
XX Paul PS, Halbur PG, Meng X, Lum MA, Lyoo YS;
XX WPI; 1994-146025/18.
XX
XX New porcine respiratory and reproductive disease virus - used to prepare
PT vaccines and antibodies for diagnosis, treatment and prophylaxis of virus
PT infection.
XX
```

```
XX
XX Example 3; Page 24; 98pp; English.
XX
XX The sequences given in AAQ63573-79 are primers which were used in the
CC amplification of probes for the isolation of the 3' terminal region of
CC the infectious agent associated with the Iowa strain of porcine
CC respiratory and reproductive syndrome, termed ISU-12. The isolated ISU-12
CC sequence may be used to infect cells and from these, the vaccine of the
CC invention can be produced. This vaccine may be used for protecting pigs
CC against a porcine respiratory and reproductive disease (PRRD). Antibodies
CC to the vaccine may also be used in treating PRRD and for assaying for the
CC virus. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 1.0%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 41;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 562 CGCTATGTGAGCTGAATGGC 581
XX 20 CGCTATGTGAGCTGAATGGC 1
XX
XX RESULT 52
XX AAQ63575/c
XX ID AAQ63575 standard; DNA; 20 BP.
XX
XX AC AAQ63575;
XX
XX 25-MAR-2003 (revised)
XX 12-DEC-1994 (first entry)
XX
XX PCR primer PP286.
XX
XX Primer; polymerase chain reaction; PCR; amplify; probe; Iowa strain;
XX infectious agent; porcine respiratory and reproductive syndrome; ISU-12;
XX vaccine; porcine respiratory and reproductive disease; PRRD; antibody;
XX assay; ss.
XX
XX Synthetic.
XX
XX EP595436-A2.
XX
XX 04-MAY-1994.
XX
XX 29-OCT-1993; 93EP-00203042.
XX
XX 30-OCT-1992; 92US-00969071.
XX 05-OCT-1993; 93US-00131625.
XX
XX (SOLV ) SOLVAY ANIMAL HEALTH INC.
XX (IOWA ) UNIV IOWA STATE RES FOUND INC.
XX
XX Paul PS, Halbur PG, Meng X, Lum MA, Lyoo YS;
XX WPI; 1994-146025/18.
XX
XX New porcine respiratory and reproductive disease virus - used to prepare
PT vaccines and antibodies for diagnosis, treatment and prophylaxis of virus
PT infection.
XX
XX Example 3; Page 24; 98pp; English.
XX
XX The sequences given in AAQ63573-79 are primers which were used in the
CC amplification of probes for the isolation of the 3' terminal region of
CC the infectious agent associated with the Iowa strain of porcine
CC respiratory and reproductive syndrome, termed ISU-12. The isolated ISU-12
CC sequence may be used to infect cells and from these, the vaccine of the
CC invention can be produced. This vaccine may be used for protecting pigs
CC against a porcine respiratory and reproductive disease (PRRD). Antibodies
CC to the vaccine may also be used in treating PRRD and for assaying for the
CC virus. (Updated on 25-MAR-2003 to correct PN field.)
XX
```

```

XX SQ Sequence 20 BP; 6 A; 8 C; 5 G; 1 T; 0 U; 0 Other;
XX
Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 963 GTGCTTGATGGTTCGCGGC 982
Db 20 GTGCTTGATGGTTCGCGGC 1

RESULT 53
AAT14383/c
ID AAT14383 standard; DNA; 20 BP.
XX
AC AAT14383;
XX
DT 04-AUG-1996 (first entry)
XX
DE PRRSV VR 2385 primer PP386.
XX
KW Porcine reproductive and respiratory syndrome virus; PRRSV; vaccine;
KW antigen; polymerase chain reaction; PCR; primer; ss.
XX
OS Synthetic.
XX
PN WO9606619-A1.
XX
PD 07-MAR-1996.
XX
PF 01-SEP-1995; 95WO-US010904.
XX
PR 01-SEP-1994; 94US-00301435.
XX
(PAUL/) PAUL P S.
PA (MENG/) MENG X.
PA (HALB/) HALBUR P.
PA (MORO/) MOROZOV I.
PA (LUMM/) LUM M A.
XX
PI Paul PS, Meng X, Halbur P, Morozov I, Lum MA;
XX WPI; 1996-160132/16.
XX
PT New porcine reproductive and respiratory syndrome virus DNA - and
PT proteins encoded by open reading frames of an Iowa strain of the virus;
PT are used in vaccines against PRRSV in pigs.
XX
PS Disclosure; Page 64; 228pp; English.
XX
CC Primers PP288 (AAT14381), PP289 (AAT14382) and PP386 (AAT14383) were used
CC as sequencing primers to obtain internal sequences of cDNA clones
CC corresponding to the 3' end of porcine reproductive and respiratory
CC syndrome virus (PRRSV) Iowa strain isolate ISU-12 (VR 2385). A 2062-bp 3'
CC terminal sequence (AAT14389) of VR 2385 was obt. that included ORFs 5, 6
CC and 7 (AAT14390-92) coding for proteins (AAR94701-03) useful in vaccine
CC development
XX
SQ Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
XX
Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 562 CGCTATGTGAGCTGAATGGC 581
Db 20 CGCTATGTGAGCTGAATGGC 1

RESULT 54
AAT14379/c
ID AAT14379 standard; DNA; 20 BP.
XX
AC AAT14380;
XX
DT 04-AUG-1996 (first entry)
XX
DE PRRSV VR 2385 primer PP287.
XX
KW Porcine reproductive and respiratory syndrome virus; PRRSV; vaccine;
KW antigen; polymerase chain reaction; PCR; primer; ss.
XX
OS Synthetic.
XX
PN WO9606619-A1.
XX

```

```
PD 07-MAR-1996.
XX
PF 01-SEP-1995; 95WO-US010904.
XX
PT 01-SEP-1994; 94US-00301435.
XX
PA (PAUL/) PAUL P S.
PA (MENG/) MENG X.
PA (HALB/) HALBUR P.
PA (MORO/) MOROZOV I.
PA (LUMM/) LUM M A.
XX
PI Paul PS, Meng X, Halbur P, Morozov I, Lum MA;
XX
XX WPI; 1996-160132/16.
XX
PT New porcine reproductive and respiratory syndrome virus DNA - and
PT proteins encoded by open reading frames of an Iowa strain of the virus;
PT are used in vaccines against PRRSV in pigs.
XX
PS Disclosure; Page 64; 228pp; English.
XX
CC Primers PP286 (AAT14379) and PP287 (AAT14380) were used to generate a
CC probe from the 5' end of lambda-75, a cDNA clone including the 3' end of
CC porcine reproductive and respiratory syndrome virus (PRRSV) Iowa strain
CC isolate ISU-12 (VR 2385). Positive plaques were identified using the
CC probe. The primers were also used as sequencing primers to obtain
CC internal sequences. A 2062-bp 3' terminal sequence (AAT14389) of VR 2385
CC was obt'd. that included ORFs 5, 6 and 7 (AAT14390-92) coding for proteins
CC (AAR94701-03) useful in vaccine development
XX
XX Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
XX
Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 554 CAACTTGACGCTATGTGAGC 573
DB 1 CAACTTGACGCTATGTGAGC 20
XX
RESULT 56
AAT14381/c
ID AAT14381 standard; DNA; 20 BP.
XX
AC AAT14381;
XX
DT 04-AUG-1996 (first entry)
XX
DE PRRSV VR 2385 primer PP288.
XX
KW Porcine reproductive and respiratory syndrome virus; PRRSV; vaccine;
KW antigen; polymerase chain reaction; PCR; primer; ss.
XX
OS Synthetic.
XX
XX WO9606619-A1.
XX
PD 07-MAR-1996.
XX
PF 01-SEP-1995; 95WO-US010904.
XX
PR 01-SEP-1994; 94US-00301435.
XX
PA (PAUL/) PAUL P S.
PA (MENG/) MENG X.
PA (HALB/) HALBUR P.
PA (MORO/) MOROZOV I.
PA (LUMM/) LUM M A.
XX
PI Paul PS, Meng X, Halbur P, Morozov I, Lum MA;
XX
XX WPI; 1996-160132/16.
XX
PT New porcine reproductive and respiratory syndrome virus DNA - and
PT proteins encoded by open reading frames of an Iowa strain of the virus;
PT are used in vaccines against PRRSV in pigs.
XX
PS Disclosure; Page 64; 228pp; English.
XX
CC Primers PP288 (AAT14381), PP289 (AAT14382) and PP386 (AAT14383) were used
CC as sequencing primers to obtain internal sequences of cDNA clones
CC corresponding to the 3' end of porcine reproductive and respiratory
CC syndrome virus (PRRSV) Iowa strain isolate ISU-12 (VR 2385). A 2062-bp 3'
CC terminal sequence (AAT14389) of VR 2385 was obt'd. that included ORFs 5, 6
CC and 7 (AAT14390-92) coding for proteins (AAR94701-03) useful in vaccine
CC development
XX
XX Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;
XX
Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1752 CTGTGCTCAATCCAGACCGC 1771
DB 20 CTGTGCTCAATCCAGACCGC 1
XX
RESULT 57
AAT14382
ID AAT14382 standard; DNA; 20 BP.
XX
AC AAT14382;
XX
DT 04-AUG-1996 (first entry)
XX
DE PRRSV VR 2385 primer PP289.
XX
KW Porcine reproductive and respiratory syndrome virus; PRRSV; vaccine;
KW antigen; polymerase chain reaction; PCR; primer; ss.
XX
OS Synthetic.
XX
XX WO9606619-A1.
XX
PD 07-MAR-1996.
XX
PF 01-SEP-1995; 95WO-US010904.
XX
PR 01-SEP-1994; 94US-00301435.
XX
PA (PAUL/) PAUL P S.
PA (MENG/) MENG X.
PA (HALB/) HALBUR P.
PA (MORO/) MOROZOV I.
PA (LUMM/) LUM M A.
XX
PI Paul PS, Meng X, Halbur P, Morozov I, Lum MA;
XX
XX WPI; 1996-160132/16.
XX
PT New porcine reproductive and respiratory syndrome virus DNA - and
PT proteins encoded by open reading frames of an Iowa strain of the virus;
PT are used in vaccines against PRRSV in pigs.
XX
PS Disclosure; Page 64; 228pp; English.
XX
CC Primers PP288 (AAT14381), PP289 (AAT14382) and PP386 (AAT14383) were used
CC as sequencing primers to obtain internal sequences of cDNA clones
CC corresponding to the 3' end of porcine reproductive and respiratory
CC syndrome virus (PRRSV) Iowa strain isolate ISU-12 (VR 2385). A 2062-bp 3'
CC terminal sequence (AAT14389) of VR 2385 was obt'd. that included ORFs 5, 6
CC and 7 (AAT14390-92) coding for proteins (AAR94701-03) useful in vaccine
CC development
XX
```

```
XX SQ Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1131 GACTGCTAGGGCTTCTGCAC 1150
|||||
Db 1 GACTGCTAGGGCTTCTGCAC 20

RESULT 59
AAT80005
ID AAT80005 standard; DNA; 20 BP.
XX AC AAT80005;
XX DT 24-OCT-1997 (first entry)
XX DE Primer PP289 for ORFs 1b-7 of PRRSV.
XX KW Porcine reproductive and respiratory syndrome virus; PRRSV; coronavirus;
KW reproductive failure; pneumonia; pig; preweaning mortality; torovirus;
KW subgenomic mRNA; glycosylated membrane protein; nucleocapsid protein;
KW membrane associated protein; vaccine; antibody; therapy; primer; amplify;
KW polymerase chain reaction; PCR; ss.
XX OS Synthetic.
XX PN WO9640932-A1.
XX PD 19-DEC-1996.
XX PF 07-JUN-1996; 96WO-US008962.
XX PR 07-JUN-1995; 95US-00478316.
XX PA (PAUL/) PAUL P S.
PA (MENG/) MENG X.
PA (HALB/) HALBUR P.
PA (MORO/) MOROZOV I.
XX PI Paul PS, Meng X, Halbur P, Morozov I;
XX WPI; 1997-108646/10.
XX DR Porcine reproductive and respiratory syndrome virus DNA sequences -
XX PT useful for diagnosis, treatment and prevention of infection in pigs.
XX PS Example 2; Page 81; 114pp; English.
XX CC AAT79997-T80016 represent amplification primers for ORFs 1b-7 of porcine
CC reproductive and respiratory syndrome virus (PRRSV). The amplified
CC sequences can be used in the polynucleotides of the invention. PRRSV is a
CC new and severe disease in swine, characterised by reproductive failure in
CC sows and gilts, pneumonia in young growing pigs, and an increase in
CC preweaning mortality. However, there are marked differences in
CC pathogenicity between isolates (with ISU3927 being the least virulent
CC isolate known). The genomic organisation of PRRSV resembles coronaviruses
CC and toroviruses, in that their replication involves the formation of a 3'
CC -coterminally nested set of subgenomic mRNAs. ORFs 5, 6, and 7 encode a
CC glycosylated membrane protein, an unglycosylated membrane protein, and a
CC nucleocapsid protein, respectively. ORFs 2 to 4 encode proteins with the
CC characteristics of membrane associated proteins. The polynucleotides of
CC the invention, encode a protein that is at least 88%, but less than 100%
CC homologous to one of proteins encoded by one of the ORFs of these
CC sequences. The polynucleotides of the invention, and their encoded
CC polypeptides can be used in a vaccine to protect a pig against PRRSV.
CC Antibodies raised against the polypeptides can be used to treat a pig
XX suffering from PRRSV, and to assay for a PRRSV
XX SQ Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1131 GACTGCTAGGGCTTCTGCAC 1150
|||||
Db 1 GACTGCTAGGGCTTCTGCAC 20

RESULT 58
AAT80007
ID AAT80007 standard; DNA; 20 BP.
XX AC AAT80007;
XX DT 24-OCT-1997 (first entry)
XX DE Primer PP289 for ORFs 1b-7 of PRRSV.
XX KW Porcine reproductive and respiratory syndrome virus; PRRSV; coronavirus;
KW reproductive failure; pneumonia; pig; preweaning mortality; torovirus;
KW subgenomic mRNA; glycosylated membrane protein; nucleocapsid protein;
KW membrane associated protein; vaccine; antibody; therapy; primer; amplify;
KW polymerase chain reaction; PCR; ss.
XX OS Synthetic.
XX PN WO9640932-A1.
XX PD 19-DEC-1996.
XX PF 07-JUN-1996; 96WO-US008962.
XX PR 07-JUN-1995; 95US-00478316.
XX PA (PAUL/) PAUL P S.
PA (MENG/) MENG X.
PA (HALB/) HALBUR P.
PA (MORO/) MOROZOV I.
XX PI Paul PS, Meng X, Halbur P, Morozov I;
XX WPI; 1997-108646/10.
XX DR Porcine reproductive and respiratory syndrome virus DNA sequences -
XX PT useful for diagnosis, treatment and prevention of infection in pigs.
XX PS Example 2; Page 81; 114pp; English.
XX CC AAT79997-T80016 represent amplification primers for ORFs 1b-7 of porcine
CC reproductive and respiratory syndrome virus (PRRSV). The amplified
CC sequences can be used in the polynucleotides of the invention. PRRSV is a
CC new and severe disease in swine, characterised by reproductive failure in
CC sows and gilts, pneumonia in young growing pigs, and an increase in
CC preweaning mortality. However, there are marked differences in
CC pathogenicity between isolates (with ISU3927 being the least virulent
CC isolate known). The genomic organisation of PRRSV resembles coronaviruses
CC and toroviruses, in that their replication involves the formation of a 3'
CC -coterminally nested set of subgenomic mRNAs. ORFs 5, 6, and 7 encode a
CC glycosylated membrane protein, an unglycosylated membrane protein, and a
CC nucleocapsid protein, respectively. ORFs 2 to 4 encode proteins with the
CC characteristics of membrane associated proteins. The polynucleotides of
CC the invention, encode a protein that is at least 88%, but less than 100%
CC homologous to one of proteins encoded by one of the ORFs of these
CC sequences. The polynucleotides of the invention, and their encoded
CC polypeptides can be used in a vaccine to protect a pig against PRRSV.
CC Antibodies raised against the polypeptides can be used to treat a pig
XX suffering from PRRSV, and to assay for a PRRSV
XX SQ Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
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DT 23-MAR-1999 (first entry)
XX Porcine reproductive and respiratory syndrome virus PCR primer #3.
DE
XX Equine arteritis virus; EAV; vaccine; structural gene; PRRSV;
KW porcine reproductive and respiratory syndrome virus; recombinant virus;
KW PCR primer; ss.
XX
OS Synthetic.
OS Porcine reproductive and respiratory syndrome virus.
PN
XX WO9855626-A2.
XX
XX 10-DEC-1998.
XX
XX 05-JUN-1998; 98WO-US012141.
XX
XX 05-JUN-1997; 97US-0048662P.
XX
XX (ORIG-) ORIGEN INC.
XX
XX Spatz SJ, Coussens PM, Reilly JD;
PI
XX WPI; 1999-080829/07.
XX
XX New recombinant porcine reproductive and respiratory syndrome virus -
PT containing nucleic acid encoding a polymerase from an RNA virus and open
PT reading frames 2-7 of the porcine virus, used particularly in vaccines.
XX
XX Example 5; Page 29; 55pp; English.
XX
XX The present invention describes a nucleic acid which encodes a polymerase
CC from an RNA virus, excluding porcine reproductive and respiratory
CC syndrome virus (PRRSV), and open reading frames (ORFs) 2-7 of PRRSV. The
CC use of a polymerase gene from RNA viruses can provide for production of
CC less mutagenic recombinant viruses. The recombinant viruses can be used
CC in vaccines which have a reduced risk of loss or reduction of efficacy.
CC The vaccines are used particularly for protecting swine against PRRSV.
CC The high fidelity RNA polymerase gene can be used as a marker that allows
CC organisms vaccinated with such a vaccine to be distinguished from
CC organisms naturally infected with wild type strains of virus or other
CC vaccines. The present sequence represents a PCR primer used in an example
CC from the present invention
XX
SQ Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1749 TGTCTGTCGTCATCCAGAC 1768
DB 20 TGTCTGTCGTCATCCAGAC 1
RESULT 63
AAX00182
ID AAX00182 standard; DNA; 20 BP.
XX
XX AAX00182;
AC
XX
XX 23-MAR-1999 (first entry)
XX
XX Porcine reproductive and respiratory syndrome virus PCR primer #4.
XX
XX Equine arteritis virus; EAV; vaccine; structural gene; PRRSV;
KW porcine reproductive and respiratory syndrome virus; recombinant virus;
KW PCR primer; ss.
XX
XX Synthetic.
OS Porcine reproductive and respiratory syndrome virus.
PN
XX WO9855626-A2.

```

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XX 10-DEC-1998.
XX
XX 05-JUN-1998; 98WO-US012141.
XX
XX 05-JUN-1997; 97US-0048662P.
XX
XX (ORIG-) ORIGEN INC.
XX
XX Spatz SJ, Coussens PM, Reilly JD;
PI
XX WPI; 1999-080829/07.
XX
XX New recombinant porcine reproductive and respiratory syndrome virus -
PT containing nucleic acid encoding a polymerase from an RNA virus and open
PT reading frames 2-7 of the porcine virus, used particularly in vaccines.
XX
XX Example 5; Page 30; 55pp; English.
XX
XX The present invention describes a nucleic acid which encodes a polymerase
CC from an RNA virus, excluding porcine reproductive and respiratory
CC syndrome virus (PRRSV), and open reading frames (ORFs) 2-7 of PRRSV. The
CC use of a polymerase gene from RNA viruses can provide for production of
CC less mutagenic recombinant viruses. The recombinant viruses can be used
CC in vaccines which have a reduced risk of loss or reduction of efficacy.
CC The vaccines are used particularly for protecting swine against PRRSV.
CC The high fidelity RNA polymerase gene can be used as a marker that allows
CC organisms vaccinated with such a vaccine to be distinguished from
CC organisms naturally infected with wild type strains of virus or other
CC vaccines. The present sequence represents a PCR primer used in an example
CC from the present invention
XX
SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1400 AACCACGCGATTTGTCGTCG 1419
DB 1 AACCACGCGATTTGTCGTCG 20
RESULT 64
ADG14112/C
ID ADG14112 standard; DNA; 20 BP.
XX
XX ADG14112;
AC
XX
XX 26-FEB-2004 (first entry)
XX
XX Porcine reproductive and respiratory syndrome virus PCR primer 2.
XX
XX porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;
KW immunoprotective; vaccine; ISU-55;
KW porcine reproductive and respiratory disease; PCR; primer; ss.
XX
XX Porcine reproductive and respiratory syndrome virus.
XX
XX WO9939582-A1.
XX
XX 12-AUG-1999.
XX
XX 08-FEB-1999; 99WO-US002630.
XX
XX 06-FEB-1998; 98US-00019793.
XX
XX (IOWA ) UNIV IOWA STATE RES FOUND INC.
XX (AMCY ) AMERICAN CYANAMID CO.
XX
XX Paul PS, Zhang Y;
XX
XX WPI; 1999-527293/44.
XX

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XX Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) DNA sequences
PT and protein products.
XX Claim 20; Page 128; 214pp; English.
XX This invention relates to novel DNA and polypeptide sequences (ISU-55) of
CC a porcine reproductive and respiratory syndrome virus (PRRSV). The
CC invention may allow development of compounds with antiviral or
CC immunoprotective activity or a vaccine. The ISU-55 polypeptides can be
CC used to induce antibodies against PRRSV effective to induce the
CC antibodies in a pig. Compositions comprising the ISU-55 polypeptides can
CC be used as vaccines to protect pigs from a porcine reproductive and
CC respiratory disease. The ISU-55 polypeptides can be used to induce
CC antibodies in pigs.
XX Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
SQ Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1092 CGCCAGTGATGATATATGCC 1111
Db 20 CGCCAGTGATGATATATGCC 1
RESULT 65
ADG14068/c
ID ADG14068 standard; DNA; 20 BP.
XX AC ADG14068;
DT 26-FEB-2004 (first entry)
XX DE Porcine reproductive and respiratory syndrome virus PCR primer 35.
DE a porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;
KW immunoprotective; vaccine; ISU-55;
KW porcine reproductive and respiratory disease; PCR; primer; ss.
XX OS Porcine reproductive and respiratory syndrome virus.
XX PN WO9939582-A1.
XX PD 12-AUG-1999.
XX PF 08-FEB-1999; 99WO-US002630.
XX PR 06-FEB-1998; 98US-00019793.
XX PA (IOWA ) UNIV IOWA STATE RES FOUND INC.
XX PA (AMCY ) AMERICAN CYANAMID CO.
XX PI Paul PS, Zhang Y;
XX WPI; 1999-527293/44.
XX DR Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) DNA sequences
and protein products.
XX Example 2; Page 71; 214pp; English.
XX This invention relates to novel DNA and polypeptide sequences (ISU-55) of
CC a porcine reproductive and respiratory syndrome virus (PRRSV). The
CC invention may allow development of compounds with antiviral or
CC immunoprotective activity or a vaccine. The ISU-55 polypeptides can be
CC used to induce antibodies against PRRSV effective to induce the
CC antibodies in a pig. Compositions comprising the ISU-55 polypeptides can
CC be used as vaccines to protect pigs from a porcine reproductive and
CC respiratory disease. The ISU-55 polypeptides can be used to induce
CC antibodies in pigs.
XX Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
SQ Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1092 CGCCAGTGATGATATATGCC 1111
Db 20 CGCCAGTGATGATATATGCC 1
RESULT 65
ADG14068/c
ID ADG14068 standard; DNA; 20 BP.
XX AC ADG14068;
DT 26-FEB-2004 (first entry)
XX DE Porcine reproductive and respiratory syndrome virus PCR primer 35.
DE a porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;
KW immunoprotective; vaccine; ISU-55;
KW porcine reproductive and respiratory disease; PCR; primer; ss.
XX OS Porcine reproductive and respiratory syndrome virus.
XX PN WO9939582-A1.
XX PD 12-AUG-1999.
XX PF 08-FEB-1999; 99WO-US002630.
XX PR 06-FEB-1998; 98US-00019793.
XX PA (IOWA ) UNIV IOWA STATE RES FOUND INC.
XX PA (AMCY ) AMERICAN CYANAMID CO.
XX PI Paul PS, Zhang Y;
XX WPI; 1999-527293/44.
XX DR Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) DNA sequences
and protein products.
XX Example 2; Page 71; 214pp; English.
XX This invention relates to novel DNA and polypeptide sequences (ISU-55) of
CC a porcine reproductive and respiratory syndrome virus (PRRSV). The
CC invention may allow development of compounds with antiviral or
CC immunoprotective activity or a vaccine. The ISU-55 polypeptides can be
CC used to induce antibodies against PRRSV effective to induce the
CC antibodies in a pig. Compositions comprising the ISU-55 polypeptides can
CC be used as vaccines to protect pigs from a porcine reproductive and
CC respiratory disease. The ISU-55 polypeptides can be used to induce
CC antibodies in pigs.
```

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SQ Sequence 20 BP; 6 A; 8 C; 5 G; 1 T; 0 U; 0 Other;
Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 963 GTGCTTGATGGTTCCGCGC 982
Db 20 GTGCTTGATGGTTCCGCGC 1
RESULT 66
ADG14067
ID ADG14067 standard; DNA; 20 BP.
XX AC ADG14067;
XX DT 26-FEB-2004 (first entry)
XX DE Porcine reproductive and respiratory syndrome virus PCR primer 34.
DE a porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;
KW porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;
KW immunoprotective; vaccine; ISU-55;
KW porcine reproductive and respiratory disease; PCR; primer; ss.
XX OS Porcine reproductive and respiratory syndrome virus.
XX PN WO9939582-A1.
XX PD 12-AUG-1999.
XX PF 08-FEB-1999; 99WO-US002630.
XX PR 06-FEB-1998; 98US-00019793.
XX PA (IOWA ) UNIV IOWA STATE RES FOUND INC.
XX PA (AMCY ) AMERICAN CYANAMID CO.
XX PI Paul PS, Zhang Y;
XX WPI; 1999-527293/44.
XX DR Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) DNA sequences
and protein products.
XX Example 2; Page 71; 214pp; English.
XX This invention relates to novel DNA and polypeptide sequences (ISU-55) of
CC a porcine reproductive and respiratory syndrome virus (PRRSV). The
CC invention may allow development of compounds with antiviral or
CC immunoprotective activity or a vaccine. The ISU-55 polypeptides can be
CC used to induce antibodies against PRRSV effective to induce the
CC antibodies in a pig. Compositions comprising the ISU-55 polypeptides can
CC be used as vaccines to protect pigs from a porcine reproductive and
CC respiratory disease. The ISU-55 polypeptides can be used to induce
CC antibodies in pigs.
XX Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
SQ Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 554 CAACTTGACGCTATGTGAGC 573
Db 1 CAACTTGACGCTATGTGAGC 20
RESULT 67
ADG14069
ID ADG14069 standard; DNA; 20 BP.
XX AC ADG14069;
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XX DT 26-FEB-2004 (first entry)
XX DE Porcine reproductive and respiratory syndrome virus PCR primer 36.
XX PA porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;
XX KW immunoprotective; vaccine; ISU-55;
XX KW porcine reproductive and respiratory disease; PCR; primer; ss.
XX OS Porcine reproductive and respiratory syndrome virus.
XX PN WO9939582-A1.
XX PD 12-AUG-1999.
XX PF 08-FEB-1999; 99WO-US002630.
XX PR 06-FEB-1998; 98US-00019793.
XX PA (IOWA ) UNIV IOWA STATE RES FOUND INC.
XX PA (AMCY ) AMERICAN CYANAMID CO.
XX PI Paul PS, Zhang Y;
XX DR WPI; 1999-527293/44.
XX CC Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) DNA sequences
XX PT and protein products.
XX PS Example 2; Page 71; 214pp; English.
XX CC This invention relates to novel DNA and polypeptide sequences (ISU-55) of
XX CC a porcine reproductive and respiratory syndrome virus (PRRSV). The
XX CC invention may allow development of compounds with antiviral or
XX CC immunoprotective activity or a vaccine. The ISU-55 polypeptides can be
XX CC used to induce antibodies against PRRSV effective to induce the
XX CC antibodies in a pig. Compositions comprising the ISU-55 polypeptides can
XX CC be used as vaccines to protect pigs from a porcine reproductive and
XX CC respiratory disease. The ISU-55 polypeptides can be used to induce
XX CC antibodies in pigs.
XX SQ Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1131 GACTGCTAGGCTTCGCAC 1150
DB 1 GACTGCTAGGCTTCGCAC 20
RESULT 68
AAL49209
ID AAL49209 standard; DNA; 20 BP.
XX AC AAL49209;
XX DT 30-OCT-2002 (first entry)
XX DE PRRSV RNA PCR primer #5.
XX KW CD 151; porcine reproductive and respiratory syndrome virus; PRRSV; pig;
XX KW selective breeding; xenotransplant; anti-RNA entry protein; anti-REP;
XX KW anti-viral; vaccine; PCR; primer; ss.
XX OS Porcine reproductive and respiratory syndrome virus.
XX PN WO200260924-A2.
XX PD 08-AUG-2002.
XX PF 29-JAN-2002; 2002WO-US002868.

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XX 29-JAN-2001; 2001US-00772044.
XX 28-JAN-2002; 2002US-00772044.
XX (UNIV ) UNIV KANSAS STATE RES FOUND.
XX PI Kapil S, Shanmukhappa K;
XX DR WPI; 2002-619225/66.
XX CC Determining susceptibility and resistance to porcine reproductive and
XX CC respiratory syndrome virus (PRRSV), useful for improving swine breeding,
XX CC by assaying for CD 151 in a sample of cellular material of known origin
XX CC from the animal.
XX PS Example 5; Page 26; 77pp + Sequence Listing; English.
XX CC The present invention relates to a method of determining the
XX CC susceptibility or resistance of an animal to porcine reproductive and
XX CC respiratory syndrome virus (PRRSV). This involves assaying for CD 151 in
XX CC a sample of cellular material of known origin from the animal. In
XX CC addition, coding sequences of CD 151 are described, and anti-viral
XX CC compounds designated anti-RNA entry proteins (anti-REPs). The method is
XX CC useful for determining susceptibility and resistance to PRRSV in an
XX CC animal. This is particularly useful for improving swine breeding or for
XX CC screening different pig breeding lines. The method is also useful for
XX CC developing non-simian recombinant cell lines for propagating the virus,
XX CC for producing anti-viral compounds or vaccines for inducing immunity
XX CC against PRRSV, and for diagnosing PRRSV infection in a swine. The present
XX CC sequence is a PCR primer used to amplify the PRRSV RNA. Note: The
XX CC sequence data for this patent did not form part of the printed
XX CC specification, but was obtained in electronic format directly from WIPO
XX CC at ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 20 BP; 2 A; 4 C; 8 G; 6 T; 0 U; 0 Other;
Query Match 1.0%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1899 TGGGCTGGCATTCTTGAGGC 1918
DB 1 TGGGCTGGCATTCTTGAGGC 20
RESULT 69
ADE39759
ID ADE39759 standard; DNA; 20 BP.
XX AC ADE39759;
XX DT 29-JAN-2004 (first entry)
XX DE Porcine CD 151 RT-PCR primer seq id 35.
XX KW porcine reproductive and respiratory syndrome virus; PRRSV;
XX KW susceptibility; CD 151; susceptibility standard; PRRSV infection;
XX KW vaccine; vaccine virus stock; non-simian vaccine; xenotransplantation;
XX KW non-simian cell line; drug testing; transformed cell line; porcine; pig;
XX KW reverse transcriptase PCR; RT-PCR; primer; ss.
XX OS Sus sp.
XX PN US2003186236-A1.
XX PD 02-OCT-2003.
XX PF 28-JAN-2002; 2002US-00058597.
XX PR 29-JAN-2001; 2001US-00772044.
XX PA (KAPI/) KAPIL S.
XX PA (SHAN/) SHANMUKHAPPA K.

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XX Kapi1 S, Shanmukhappa K;  
 XX WPI; 2003-811729/76.  
 XX  
 PT Determination of susceptibility to porcine reproductive and respiratory  
 PT syndrome virus non-invasively useful e.g. to breed pigs with low  
 PT susceptibility or classify infection resistance in an animal, by assaying  
 PT for CD 151.  
 XX  
 XX Example 5; SEQ ID NO 35; 45pp; English.  
 PS  
 XX The invention describes a method to identify susceptibility to porcine  
 CC reproductive and respiratory syndrome virus (PRRSV) in an animal by  
 CC assaying a cellular material sample from known origin in the animal for  
 CC CD 151. The method is useful to determine the susceptibility of animals  
 CC (especially pigs) to PRRSV and to compare susceptibility to a known  
 CC susceptibility standard, especially for material of the same cellular  
 CC origin. It can be used to determine if an animal is resistant to PRRSV  
 CC infection, by determining presence/absence of CD 151, and to classify  
 CC resistance levels. It is especially useful to select animals for  
 CC breeding, by selecting animals with CD 151 levels lower (especially a  
 CC least 50 % lower) than a known standard (especially for material of the  
 CC same cellular origin). Polynucleotides encoding CD 151 are useful to  
 CC produce vaccines and to modify PRRSV production in cells susceptible to  
 CC PRRSV infection, especially to increase PRRSV production e.g. in vaccine  
 CC virus stock. They are especially useful to produce non-simian vaccines,  
 CC avoiding possible introduction of primate viruses into organs  
 CC xenotransplanted from pigs to humans. They may be used to determine the  
 CC effect of single nucleotide polymorphisms on PRRSV susceptibility, and to  
 CC compare PRRSV susceptibility factors between individual swine. They can  
 CC also be used to modulate viral RNA (especially PRRSV RNA) entry into  
 CC cells by altering CD 151 amounts in cells. Polynucleotides may be  
 CC included in plasmids useful to render a cell line susceptible to PRRSV  
 CC infection, useful to produce non-simian lines for drug testing. They may  
 CC be included in vectors and used to integrate CD 151 into a chromosome.  
 CC They can also be used to produce transformed cell lines, useful e.g. to  
 CC diagnose PRRSV infection in swine herds or produce vaccines for inducing  
 CC immunity against PRRSV. This sequence represents a primer used to isolate  
 CC DNA encoding porcine CD 151.  
 XX  
 XX Sequence 20 BP; 2 A; 4 C; 8 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 1.0%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 41;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1899 TGGGCTGGCATCTTGAGGC 1918  
 Db 1 TGGGCTGGCATCTTGAGGC 20  
 RESULT 70  
 AAT16249/c  
 ID AAT16249 standard; cDNA; 19 BP.  
 XX  
 AC AAT16249;  
 XX  
 XX 09-MAY-1996 (first entry)  
 DT  
 DE VR-2332 ORF 7 PCR primer A'.  
 XX  
 XX Arterivirus; porcine reproductive and respiratory syndrome; PRRS;  
 KW vaccine; genetic immunization; diagnosis; primer; PCR;  
 KW polymerase chain reaction; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9604010-A1.  
 XX  
 PD 15-FEB-1996.  
 XX  
 PF 04-AUG-1995; 95WO-US0009927.  
 XX  
 PR 05-AUG-1994; 94US-00287941.  
 XX  
 PA (MINU ) UNIV MINNESOTA.  
 XX  
 XX Murtaugh MP, Elam MR, Kakach LT;  
 PI WPI; 1996-129128/13.  
 XX  
 DR Viral DNA from VR-2332 genome ORF 2-ORF 7 region - causes porcine  
 XX reproductive and respiratory syndrome, useful in vaccines.  
 PT  
 PT Example 11; Page 22; 90pp; English.  
 PS  
 XX Primer A (AAT16248) is based on positions 2783-2801 of a nucleic acid  
 CC (see AAT16238) comprising ORFs 2-7 of VR-2332, a strain of the porcine  
 CC reproductive and respiratory syndrome (PRRS) virus. Primer A' (AAT16249)  
 CC is based on the inverse complement of positions 3271-3289 of the  
 CC sequence. The primers were used to amplify ORF 7 (AAT16245) of VR-2332,  
 CC which encodes a nucleocapsid protein (AAR92515). The PCR product was  
 CC cloned into vector pBT25b and expressed in host cells  
 XX  
 XX Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.9%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 51;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1981 GTCACCTATTCAATTAGG 1999  
 Db 19 GTCACCTATTCAATTAGG 1  
 RESULT 71  
 AAT16248  
 ID AAT16248 standard; cDNA; 19 BP.  
 XX  
 AC AAT16248;  
 XX  
 XX 09-MAY-1996 (first entry)  
 DT  
 XX VR-2332 ORF 7 PCR primer A.  
 DE  
 XX Arterivirus; porcine reproductive and respiratory syndrome; PRRS;  
 KW vaccine; genetic immunization; diagnosis; primer; PCR;  
 KW polymerase chain reaction; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9604010-A1.  
 XX  
 PD 15-FEB-1996.  
 XX  
 PF 04-AUG-1995; 95WO-US0009927.  
 XX  
 PR 05-AUG-1994; 94US-00287941.  
 XX  
 PA (MINU ) UNIV MINNESOTA.  
 XX  
 XX Murtaugh MP, Elam MR, Kakach LT;  
 PI WPI; 1996-129128/13.  
 XX  
 DR Viral DNA from VR-2332 genome ORF 2-ORF 7 region - causes porcine  
 XX reproductive and respiratory syndrome, useful in vaccines.  
 PT  
 PT Example 11; Page 22; 90pp; English.  
 PS  
 XX Primer A (AAT16248) is based on positions 2783-2801 of a nucleic acid  
 CC (see AAT16238) comprising ORFs 2-7 of VR-2332, a strain of the porcine  
 CC reproductive and respiratory syndrome (PRRS) virus. Primer A' (AAT16249)  
 CC is based on the inverse complement of positions 3271-3289 of the  
 CC sequence. The primers were used to amplify ORF 7 (AAT16245) of VR-2332,  
 CC which encodes a nucleocapsid protein (AAR92515). The PCR product was  
 CC cloned into vector pBT25b and expressed in host cells  
 XX

XX 05-AUG-1994; 94US-00287941.  
 XX (MINU ) UNIV MINNESOTA.  
 PA  
 XX Murtaugh MP, Elam MR, Kakach LT;  
 PI WPI; 1996-129128/13.  
 XX  
 XX Viral DNA from VR-2332 genome ORF 2-ORF 7 region - causes porcine  
 PT reproductive and respiratory syndrome, useful in vaccines.  
 PT  
 PS Example 11; Page 22; 90pp; English.  
 XX  
 XX Primer A (AAT16248) is based on positions 2783-2801 of a nucleic acid  
 CC (see AAT16238) comprising ORFs 2-7 of VR-2332, a strain of the porcine  
 CC reproductive and respiratory syndrome (PRRS) virus. Primer A' (AAT16249)  
 CC is based on the inverse complement of positions 3271-3289 of the  
 CC sequence. The primers were used to amplify ORF 7 (AAT16245) of VR-2332,  
 CC which encodes a nucleocapsid protein (AAR92515). The PCR product was  
 CC cloned into vector pBT25b and expressed in host cells  
 XX  
 XX Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;  
 SQ  
 Query Match 0.9%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 51;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1981 GTCACCTATTCAATTAGG 1999  
 Db 19 GTCACCTATTCAATTAGG 1  
 RESULT 71  
 AAT16248  
 ID AAT16248 standard; cDNA; 19 BP.  
 XX  
 AC AAT16248;  
 XX  
 XX 09-MAY-1996 (first entry)  
 DT  
 XX VR-2332 ORF 7 PCR primer A.  
 DE  
 XX Arterivirus; porcine reproductive and respiratory syndrome; PRRS;  
 KW vaccine; genetic immunization; diagnosis; primer; PCR;  
 KW polymerase chain reaction; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9604010-A1.  
 XX  
 PD 15-FEB-1996.  
 XX  
 PF 04-AUG-1995; 95WO-US0009927.  
 XX  
 PR 05-AUG-1994; 94US-00287941.  
 XX  
 PA (MINU ) UNIV MINNESOTA.  
 XX  
 XX Murtaugh MP, Elam MR, Kakach LT;  
 PI WPI; 1996-129128/13.  
 XX  
 DR Viral DNA from VR-2332 genome ORF 2-ORF 7 region - causes porcine  
 XX reproductive and respiratory syndrome, useful in vaccines.  
 PT  
 PT Example 11; Page 22; 90pp; English.  
 PS  
 XX Primer A (AAT16248) is based on positions 2783-2801 of a nucleic acid  
 CC (see AAT16238) comprising ORFs 2-7 of VR-2332, a strain of the porcine  
 CC reproductive and respiratory syndrome (PRRS) virus. Primer A' (AAT16249)  
 CC is based on the inverse complement of positions 3271-3289 of the  
 CC sequence. The primers were used to amplify ORF 7 (AAT16245) of VR-2332,  
 CC which encodes a nucleocapsid protein (AAR92515). The PCR product was  
 CC cloned into vector pBT25b and expressed in host cells  
 XX

CC which encodes a nucleocapsid protein (AAR2515). The PCR product was  
 XX cloned into vector pET25b and expressed in host cells  
 SQ Sequence 19 BP; 5 A; 2 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 51;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1493 GCTGTTAAACAGGAGTGG 1511  
 |||||  
 Db 1 GCTGTTAAACAGGAGTGG 19

RESULT 72  
 AAX00180/c  
 ID AAX00180 standard; DNA; 19 BP.  
 XX  
 AC AAX00180;  
 XX  
 DT 23-MAR-1999 (first entry)  
 XX  
 DE Porcine reproductive and respiratory syndrome virus PCR primer #2.  
 XX  
 KW Equine arteritis virus; EAV; vaccine; structural gene; PRRSV;  
 KW porcine reproductive and respiratory syndrome virus; recombinant virus;  
 KW PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Porcine reproductive and respiratory syndrome virus.  
 XX  
 PN W09855626-A2.  
 XX  
 PD 10-DEC-1998.  
 XX  
 PP 05-JUN-1998; 98WO-US012141.  
 XX  
 PR 05-JUN-1997; 97US-0048662P.  
 XX  
 PA (ORIG-) ORIGEN INC.  
 XX  
 PI Spatz SJ, Coussens PM, Reilly JD;  
 XX  
 DR WPI; 1999-080829/07.  
 XX  
 PT New recombinant porcine reproductive and respiratory syndrome virus -  
 PT containing nucleic acid encoding a polymerase from an RNA virus and open  
 PT reading frames 2-7 of the porcine virus, used particularly in vaccines.  
 XX  
 PS Example 5; Page 29; 55pp; English.  
 XX  
 CC The present invention describes a nucleic acid which encodes a polymerase  
 CC from an RNA virus, excluding porcine reproductive and respiratory  
 CC syndrome virus (PRRSV), and open reading frames (ORFs) 2-7 of PRRSV. The  
 CC use of a polymerase gene from RNA viruses can provide for production of  
 CC less mutagenic recombinant viruses. The recombinant viruses can be used  
 CC in vaccines which have a reduced risk of loss or reduction of efficacy.  
 CC The vaccines are used particularly for protecting swine against PRRSV.  
 CC The high fidelity RNA polymerase gene can be used as a marker that allows  
 CC organisms vaccinated with such a vaccine to be distinguished from  
 CC organisms naturally infected with wild type strains of virus or other  
 CC vaccines. The present sequence represents a PCR primer used in an example  
 CC from the present invention  
 XX  
 SQ Sequence 19 BP; 6 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 51;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1981 GTCACCTATTCATTTAGGG 1999  
 |||||  
 Db 19 GTCACCTATTCATTTAGGG 1

RESULT 73  
 AAT79553  
 ID AAT79553 standard; DNA; 20 BP.  
 XX  
 AC AAT79553;  
 XX  
 DT 27-MAR-1998 (first entry)  
 XX  
 DE Primer for PRRSV ORF5 cDNA.  
 XX  
 KW PRRSV; open reading frame 5; ORF5; differentiation;  
 KW epidemiological study; PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Porcine reproductive and respiratory syndrome virus.  
 XX  
 PN W09731652-A1.  
 XX  
 PD 04-SEP-1997.  
 XX  
 PP 28-FEB-1997; 97WO-US003126.  
 XX  
 PR 01-MAR-1996; 96US-00609334.  
 XX  
 PA (USDA ) US SEC OF AGRIC.  
 XX  
 PI Wesley RD, Clouser DF, Mengeling WL, Andreyev VG, Vorwald AC;  
 PI Lager KM;  
 XX  
 DR WPI; 1997-448443/41.  
 XX  
 PT Differentiating porcine reproductive and respiratory syndrome virus  
 PT strains - by restriction enzyme fragment length analysis.  
 XX  
 PS Claim 8; Page 48; 63pp; English.  
 XX  
 CC The present sequence was used in the development of a method for  
 CC differentiating a 1st strain of porcine reproductive and respiratory  
 CC syndrome virus (PRRSV) from a 2nd. The method comprises selecting at  
 CC least 1 restriction enzyme (RE), which yields a distinctive fragment  
 CC profile from ORF5 cDNA from the 1st and 2nd strains, cleaving the cDNA of  
 CC the 1st and 2nd strains and comparing the RE fragment patterns. The  
 CC method can be used to distinguish PRRSV strains from each other, and  
 CC field strains from the currently used vaccine strain. It can also be used  
 CC in epidemiological studies to evaluate the source and transmission of  
 CC PRRSV field strains. The ORF5 region of the PRRSV genome is sufficiently  
 CC variable among strains to allow differentiation, while being stable  
 CC enough to have a low probability of mutational change during repeated in  
 CC vitro or in vivo passages of a particular strain  
 XX  
 SQ Sequence 20 BP; 4 A; 4 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.9%; Score 19; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 57;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 397 CATTCGTGTGGCAATTTGA 415  
 |||||  
 Db 2 CATTCGTGTGGCAATTTGA 20

RESULT 74  
 AAQ63588/c  
 ID AAQ63588 standard; DNA; 25 BP.  
 XX  
 AC AAQ63588;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 12-DEC-1994 (first entry)  
 XX  
 DE ISU-12 ORF 6 primer #2.

```

XX Primer; polymerase chain reaction; PCR; amplify; probe; Iowa strain;
KW infectious agent; porcine respiratory and reproductive syndrome; ISU-12;
KW vaccine; porcine respiratory and reproductive disease; PRRD; antibody;
KW assay; ss.
XX
OS Synthetic.
XX
PN EP595436-A2.
XX
PD 04-MAY-1994.
XX
XX 29-OCT-1993; 93BP-00203042.
XX
PR 30-OCT-1992; 92US-00969071.
PR 05-OCT-1993; 93US-00131625.
XX
PA (SOLV ) SOLVAY ANIMAL HEALTH INC.
PA (IOWA ) UNIV IOWA STATE RES FOUND INC.
XX
PI Paul PS, Halbur PG, Meng X, Lum MA, Lyoo YS;
XX
DR WPI; 1994-146025/18.
XX
XX New porcine respiratory and reproductive disease virus - used to prepare
PT vaccines and antibodies for diagnosis, treatment and prophylaxis of virus
PT infection.
XX
XX Example 4; Page 26; 98pp; English.
XX
XX The sequences given in AAQ63585-90 are primers which were used in the
CC amplification of ORF-5, ORF-6 and ORF-7 of the infectious agent
CC associated with the Iowa strain of porcine respiratory and reproductive
CC syndrome, termed ISU-12. The isolated ISU-12 sequence may be used to
CC infect cells and from these, the vaccine of the invention can be
CC produced. This vaccine may be used for protecting pigs against a porcine
CC respiratory and reproductive disease (PRRD). Antibodies to the vaccine
CC may also be used in treating PRRD and for assaying for the virus.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 25 BP; 6 A; 5 C; 8 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 19; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 92;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1581 GTCATCAGCTGTGCCAGA 1599
Db |||||
25 GTCATCAGCTGTGCCAGA 7

RESULT 75
AAT14401/c
ID AAT14401 standard; DNA; 25 BP.
XX
AC AAT14401;
XX
DT 05-AUG-1996 (first entry)
XX
DE PRRSV VR 2385 ORF-6 PCR primer.
XX
XX Porcine reproductive and respiratory syndrome virus; PRRSV; vaccine;
KW antigen; baculovirus; vector; Hi-Five; insect; polymerase chain reaction;
KW PCR; primer; ss.
XX
OS Synthetic.
XX
PN WO9606619-A1.
XX
PD 07-MAR-1996.
XX
XX 01-SEP-1995; 95WO-US010904.
XX

```

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PR 01-SEP-1994; 94US-00301435.
XX
XX (PAUL/) PAUL P S.
PA (MENG/) MENG X.
PA (HALB/) HALBUR P.
PA (MORO/) MOROZOV I.
PA (LUMM/) LUM M A.
XX
PI Paul PS, Meng X, Halbur P, Morozov I, Lum MA;
XX
DR WPI; 1996-160132/16.
XX
XX New porcine reproductive and respiratory syndrome virus DNA - and
PT proteins encoded by open reading frames of an Iowa strain of the virus;
PT are used in vaccines against PRRSV in pigs.
XX
XX Disclosure; Page 70; 228pp; English.
XX
XX 2 Primers (AAT14400 and AAT14401) were used to amplify ORF-6 (see also
CC AAT14391) of porcine reproductive and respiratory syndrome virus (PRRSV)
CC Iowa strain isolate ISU-12 (VR 2385). ORF-5 (AAT14390) was amplified
CC using 2 other primers (AAT14398-99) and ORF-7 (AAT14392) using 2 further
CC primers (AAT14402-03). Amplified fragments were cloned into baculovirus
CC transfer vector pVli393 and used for prodn. of recombinant Iowa strain
CC infectious agent proteins (ORF5-7 products, see also AAR94701-03) in Hi-
CC Five insect cells. These proteins can be used in subunit vaccines against
CC PRRSV in pigs
XX
XX Sequence 25 BP; 6 A; 5 C; 8 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 19; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 92;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1581 GTCATCAGCTGTGCCAGA 1599
Db |||||
25 GTCATCAGCTGTGCCAGA 7

RESULT 76
ADG14131/c
ID ADG14131 standard; DNA; 25 BP.
XX
AC ADG14131;
XX
DT 26-FEB-2004 (first entry)
XX
DE Porcine reproductive and respiratory syndrome virus PCR primer 21.
XX
XX porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;
KW immunoprotective; vaccine; ISU-55;
KW porcine reproductive and respiratory disease; PCR; primer; ss.
XX
OS Porcine reproductive and respiratory syndrome virus.
XX
PN WO9939582-A1.
XX
XX 12-AUG-1999.
XX
PF 08-FEB-1999; 99WO-US002630.
XX
XX 06-FEB-1998; 98US-00019793.
XX
XX (IOWA ) UNIV IOWA STATE RES FOUND INC.
PA (AMCY ) AMERICAN CYANAMID CO.
XX
PI Paul PS, Zhang Y;
XX
DR WPI; 1999-527293/44.
XX
XX Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) DNA sequences
PT and protein products.
XX

```

PS Example 5; Page 91; 214pp; English.

XX This invention relates to novel DNA and polypeptide sequences (ISU-55) of

CC a porcine reproductive and respiratory syndrome virus (PRRSV). The

CC invention may allow development of compounds with antiviral or

CC immunoprotective activity or a vaccine. The ISU-55 polypeptides can be

CC used to induce antibodies against PRRSV effective to induce the

CC antibodies in a pig. Compositions comprising the ISU-55 polypeptides can

CC be used as vaccines to protect pigs from a porcine reproductive and

CC respiratory disease. The ISU-55 polypeptides can be used to induce

CC antibodies in pigs.

XX

SQ Sequence 25 BP; 6 A; 5 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 0.9%; Score 19; DB 1; Length 25;

Best Local Similarity 100.0%; Pred. No. 92;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1581 GTCAATCAGCTGTGCCAGA 1599

DB 25 GTCAATCAGCTGTGCCAGA 7

RESULT 77

AAAL49206/c

ID AAL49206 standard; DNA; 22 BP.

XX

AC AAL49206;

XX

DT 30-OCT-2002 (first entry)

XX

DE PRRSV RNA PCR primer #2.

XX

KW CD 151; porcine reproductive and respiratory syndrome virus; PRRSV; pig;

KW selective breeding; xenotransplant; anti-RNA entry protein; anti-REP;

KW anti-viral; vaccine; PCR; primer; ss.

XX

OS Porcine reproductive and respiratory syndrome virus.

XX

PN WO200260924-A2.

XX

PD 08-AUG-2002.

XX

PF 29-JAN-2002; 2002WO-US002868.

XX

PR 29-JAN-2001; 2001US-00772044.

XX

PR 28-JAN-2002; 2002US-00772044.

XX

PA (UNIV ) UNIV KANSAS STATE RES FOUND.

XX

PI Kapil S, Shanmukhappa K;

XX

DR WPI; 2002-619225/66.

XX

PT Determining susceptibility and resistance to porcine reproductive and

PT respiratory syndrome virus (PRRSV), useful for improving swine breeding,

PT by assaying for CD 151 in a sample of cellular material of known origin

PT from the animal.

XX

PS Example 1; Page 20; 77pp + Sequence Listing; English.

XX

CC The present invention relates to a method of determining the

CC susceptibility or resistance of an animal to porcine reproductive and

CC respiratory syndrome virus (PRRSV). This involves assaying for CD 151 in

CC a sample of cellular material of known origin from the animal. In

CC addition, coding sequences of CD 151 are described, and anti-viral

CC compounds designated anti-RNA entry proteins (anti-REPs). The method is

CC useful for determining susceptibility and resistance to PRRSV in an

CC animal. This is particularly useful for improving swine breeding or for

CC screening different pig breeding lines. The method is also useful for

CC developing non-simian recombinant cell lines for propagating the virus,

CC for producing anti-viral compounds or vaccines for inducing immunity

CC against PRRSV, and for diagnosing PRRSV infection in a swine. The present

CC sequence is a PCR primer used to amplify the PRRSV RNA. Note: The

CC sequence data for this patent did not form part of the printed

CC specification, but was obtained in electronic format directly from WIPO

CC at ftp.wipo.int/pub/published\_pct\_sequences

XX

SQ Sequence 22 BP; 3 A; 8 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 18.8; DB 1; Length 22;

Best Local Similarity 90.9%; Pred. No. 75;

Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 2023 ATTGGCGAGACACACGCGC 2044

DB 22 ATTGGCGAGACACGCGC 1

RESULT 78

AD39756/c

ID ADE39756 standard; DNA; 22 BP.

XX

AC ADE39756;

XX

DT 29-JAN-2004 (first entry)

XX

DE Porcine CD 151 RT-PCR primer seq id 32.

XX

KW porcine reproductive and respiratory syndrome virus; PRRSV;

KW susceptibility; CD 151; susceptibility standard; PRRSV infection;

KW vaccine; vaccine virus stock; non-simian vaccine; xenotransplantation;

KW non-simian cell line; drug testing; transformed cell line; porcine; pig;

KW reverse transcriptase PCR; RT-PCR; primer; ss.

XX

OS Sus sp.

XX

PN US2003186236-A1.

XX

PD 02-OCT-2003.

XX

PF 28-JAN-2002; 2002US-00058597.

XX

PR 29-JAN-2001; 2001US-00772044.

XX

PA (KAPIL/) KAPIL S.

XX

PI (SHAN/) SHANMUKHAPPA K.

XX

XX Kapil S, Shanmukhappa K;

DR WPI; 2003-811729/76.

XX

PT Determination of susceptibility to porcine reproductive and respiratory

PT syndrome virus non-invasively useful e.g. to breed pigs with low

PT susceptibility or classify infection resistance in an animal, by assaying

PT for CD 151.

XX

PS Example 1; SEQ ID NO 32; 45pp; English.

XX

CC The invention describes a method to identify susceptibility to porcine

CC reproductive and respiratory syndrome virus (PRRSV) in an animal by

CC assaying a cellular material sample from known origin in the animal for

CC CD 151. The method is useful to determine the susceptibility of animals

CC (especially pigs) to PRRSV and to compare susceptibility to a known

CC susceptibility standard, especially for material of the same cellular

CC origin. It can be used to determine if an animal is resistant to PRRSV

CC infection, by determining presence/absence of CD 151, and to classify

CC resistance levels. It is especially useful to select animals for

CC breeding, by selecting animals with CD 151 levels lower (especially a

CC least 50 % lower) than a known standard (especially for material of the

CC same cellular origin). Polynucleotides encoding CD 151 are useful to

CC produce vaccines and to modify PRRSV production in cells susceptible to

CC PRRSV infection, especially to increase PRRSV production e.g. in vaccine

CC virus stock. They are especially useful to produce non-simian vaccines,

CC avoiding possible introduction of primate viruses into organs

CC xenotransplanted from pigs to humans. They may be used to determine the

CC effect of single nucleotide polymorphisms on PRRSV susceptibility, and to  
CC compare PRRSV susceptibility factors between individual swine. They can  
CC also be used to modulate viral RNA (especially PRRSV RNA) entry into  
CC cells by altering CD 151 amounts in cells. Polynucleotides may be  
CC included in plasmids useful to render a cell line susceptible to PRRSV  
CC infection, useful to produce non-simian lines for drug testing. They may  
CC be included in vectors and used to integrate CD 151 into a chromosome.  
CC They can also be used to produce transformed cell lines, useful e.g. to  
CC diagnose PRRSV infection in swine herds or produce vaccines for inducing  
CC immunity against PRRSV. This sequence represents a primer used to isolate  
CC DNA encoding porcine CD 151.  
XX  
XX  
SQ Sequence 22 BP; 3 A; 8 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 18.8; DB 1; Length 22;  
Best Local Similarity 90.9%; Pred. No. 75;  
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2023 ATTGGCGAGAACACACGCGCG 2044  
DB ||||||||||||| |||||  
22 ATTGGCGAGAACCATGCGGCG 1

RESULT 79  
ADG14111  
ID ADG14111 standard; DNA; 20 BP.  
XX  
AC ADG14111;  
XX  
DT 26-FEB-2004 (first entry)  
DE Porcine reproductive and respiratory syndrome virus PCR primer 1.  
XX  
KW porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;  
KW immunoprotective; vaccine; ISU-55;  
KW porcine reproductive and respiratory disease; PCR; primer; ss.  
XX  
OS Porcine reproductive and respiratory syndrome virus.  
XX  
FN WO9939582-A1.  
XX  
PD 12-AUG-1999.  
XX  
PF 08-FEB-1999; 99WO-US002630.  
XX  
PR 06-FEB-1998; 98US-00019793.  
XX

PA (IOWA ) UNIV IOWA STATE RES FOUND INC.  
PA (AMCY ) AMERICAN CYANAMID CO.  
XX  
PI Paul PS, Zhang Y;  
XX  
DR WPI; 1999-527293/44.  
XX  
PT Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) DNA sequences  
and protein products.  
XX  
PS Claim 20; Page 128; 214pp; English.

XX This invention relates to novel DNA and polypeptide sequences (ISU-55) of  
CC a porcine reproductive and respiratory syndrome virus (PRRSV). The  
CC invention may allow development of compounds with antiviral or  
CC immunoprotective activity or a vaccine. The ISU-55 polypeptides can be  
CC used to induce antibodies against PRRSV effective to induce the  
CC antibodies in a pig. Compositions comprising the ISU-55 polypeptides can  
CC be used as vaccines to protect pigs from a porcine reproductive and  
CC respiratory disease. The ISU-55 polypeptides can be used to induce  
CC antibodies in pigs.  
XX

SQ Sequence 20 BP; 5 A; 6 C; 7 G; 2 T; 0 U; 0 Other;  
Query Match 0.9%; Score 18.4; DB 1; Length 20;  
Best Local Similarity 95.0%; Pred. No. 69;

Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 86 CGCAGCGCGATAGGACACC 105  
DB ||||||||||||| |||||  
1 CGTACGCGCGATAGGACACC 20

RESULT 80  
AAT80003  
ID AAT80003 standard; DNA; 18 BP.  
XX  
AC AAT80003;  
XX  
DT 24-OCT-1997 (first entry)  
DE Primer XM1024 for ORFs 1b-7 of PRRSV.  
XX  
KW Porcine reproductive and respiratory syndrome virus; PRRSV; coronavirus;  
KW reproductive failure; pneumonia; pig; preweaning mortality; torovirus;  
KW subgenomic mRNA; glycosylated membrane protein; nucleocapsid protein;  
KW membrane associated protein; vaccine; antibody; therapy; primer; amplify;  
KW polymerase chain reaction; PCR; ss.  
XX  
OS Synthetic.  
XX  
FN WO9640932-A1.  
XX  
PD 19-DEC-1996.  
XX  
PF 07-JUN-1996; 96WO-US008962.  
XX  
PR 07-JUN-1995; 95US-00478316.  
XX  
PA (PAUL/) PAUL P S.  
PA (MENG/) MENG X.  
PA (HALB/) HALBUR P.  
PA (MORO/) MOROZOV I.  
XX  
PI Paul PS, Meng X, Halbur P, Morozov I;  
XX  
DR WPI; 1997-108646/10.  
XX  
PT Porcine reproductive and respiratory syndrome virus DNA sequences -  
useful for diagnosis, treatment and prevention of infection in pigs.  
XX  
PS Example 2; Page 81; 114pp; English.

XX AAT79997-T80016 represent amplification primers for ORFs 1b-7 of porcine  
CC reproductive and respiratory syndrome virus (PRRSV). The amplified  
CC sequences can be used in the polynucleotides of the invention. PRRSV is a  
CC new and severe disease in swine, characterised by reproductive failure in  
CC sows and gilts, pneumonia in young growing pigs, and an increase in  
CC preweaning mortality. However, there are marked differences in  
CC pathogenicity between isolates (with ISU3927 being the least virulent  
CC isolate known). The genomic organisation of PRRSV resembles coronaviruses  
CC and toroviruses, in that their replication involves the formation of a 3'  
CC -terminal nested set of subgenomic mRNAs. ORFs 5, 6, and 7 encode a  
CC glycosylated membrane protein, an unglycosylated membrane protein, and a  
CC nucleocapsid protein, respectively. ORFs 2 to 4 encode proteins with the  
CC characteristics of membrane associated proteins. The polynucleotides of  
CC the invention, encode a protein that is at least 88%, but less than 100%  
CC homologous to one of proteins encoded by one of the ORFs of these  
CC sequences. The polynucleotides of the invention, and their encoded  
CC polypeptides can be used in a vaccine to protect a pig against PRRSV.  
CC Antibodies raised against the polypeptides can be used to treat a pig  
CC suffering from PRRSV, and to assay for a PRRSV  
XX  
SQ Sequence 18 BP; 5 A; 6 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.9%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 63;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;



```

QY      110 TATATCACTGTCTCAGCC 127
Db      1 TATATCACTGTCTCAGCC 18

RESULT 81
AAT80008/c
ID AAT80008 standard; DNA; 18 BP.
XX AC AAT80008;
XX DT 24-OCT-1997 (first entry)
XX DE Primer XM780 for ORFs 1b-7 of PRRSV.
XX KW Porcine reproductive and respiratory syndrome virus; PRRSV; coronavirus;
KW reproductive failure; pneumonia; pig; preweaning mortality; torovirus;
KW subgenomic mRNA; glycosylated membrane protein; nucleocapsid protein;
KW membrane associated protein; vaccine; antibody; therapy; primer; amplify;
KW polymerase chain reaction; PCR; ss.
XX OS Synthetic.
XX PN WO9640932-A1.
XX PD 19-DEC-1996.
XX PF 07-JUN-1996; 96WO-US008962.
XX PR 07-JUN-1995; 95US-00478316.
XX PA (PAUL/) PAUL P S.
XX PA (MENG/) MENG X.
XX PA (HALB/) HALBUR P.
XX PA (MORO/) MOROZOV I.
XX PI Paul PS, Meng X, Halbur P, Morozov I;
XX WPI; 1997-108646/10.
XX PT Porcine reproductive and respiratory syndrome virus DNA sequences -
XX useful for diagnosis, treatment and prevention of infection in pigs.
XX PS Example 2; Page 81; 114pp; English.
XX CC AAT79997-T80016 represent amplification primers for ORFs 1b-7 of porcine
CC reproductive and respiratory syndrome virus (PRRSV). The amplified
CC sequences can be used in the polynucleotides of the invention. PRRSV is a
CC new and severe disease in swine, characterised by reproductive failure in
CC sows and guilts, pneumonia in young growing pigs, and an increase in
CC preweaning mortality. However, there are marked differences in
CC pathogenicity between isolates (with ISU3927 being the least virulent
CC isolate known). The genomic organisation of PRRSV resembles coronaviruses
CC and toroviruses, in that their replication involves the formation of a 3'
CC -coterminated nested set of subgenomic mRNAs. ORFs 5, 6, and 7 encode a
CC glycosylated membrane protein, an unglycosylated membrane protein, and a
CC nucleocapsid protein, respectively. ORFs 2 to 4 encode proteins with the
CC characteristics of membrane associated proteins. The polynucleotides of
CC the invention, encode a protein that is at least 88%, but less than 100%
CC homologous to one of proteins encoded by one of the ORFs of these
CC sequences. The polynucleotides of the invention, and their encoded
CC polypeptides can be used in a vaccine to protect a pig against PRRSV.
CC Antibodies raised against the polypeptides can be used to treat a pig
CC suffering from PRRSV, and to assay for a PRRSV
XX Sequence 18 BP; 3 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
XX Query Match 0.9%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 63;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1428 GCTCCACTAGGTCACG 1445
Db      1 TATATCACTGTCTCAGCC 18

RESULT 82
AAT80004/c
ID AAT80004 standard; DNA; 18 BP.
XX AC AAT80004;
XX DT 24-OCT-1997 (first entry)
XX DE Primer XM1023 for ORFs 1b-7 of PRRSV.
XX KW Porcine reproductive and respiratory syndrome virus; PRRSV; coronavirus;
KW reproductive failure; pneumonia; pig; preweaning mortality; torovirus;
KW subgenomic mRNA; glycosylated membrane protein; nucleocapsid protein;
KW membrane associated protein; vaccine; antibody; therapy; primer; amplify;
KW polymerase chain reaction; PCR; ss.
XX OS Synthetic.
XX PN WO9640932-A1.
XX PD 19-DEC-1996.
XX PF 07-JUN-1996; 96WO-US008962.
XX PR 07-JUN-1995; 95US-00478316.
XX PA (PAUL/) PAUL P S.
XX PA (MENG/) MENG X.
XX PA (HALB/) HALBUR P.
XX PA (MORO/) MOROZOV I.
XX PI Paul PS, Meng X, Halbur P, Morozov I;
XX WPI; 1997-108646/10.
XX PT Porcine reproductive and respiratory syndrome virus DNA sequences -
XX useful for diagnosis, treatment and prevention of infection in pigs.
XX PS Example 2; Page 81; 114pp; English.
XX CC AAT79997-T80016 represent amplification primers for ORFs 1b-7 of porcine
CC reproductive and respiratory syndrome virus (PRRSV). The amplified
CC sequences can be used in the polynucleotides of the invention. PRRSV is a
CC new and severe disease in swine, characterised by reproductive failure in
CC sows and guilts, pneumonia in young growing pigs, and an increase in
CC preweaning mortality. However, there are marked differences in
CC pathogenicity between isolates (with ISU3927 being the least virulent
CC isolate known). The genomic organisation of PRRSV resembles coronaviruses
CC and toroviruses, in that their replication involves the formation of a 3'
CC -coterminated nested set of subgenomic mRNAs. ORFs 5, 6, and 7 encode a
CC glycosylated membrane protein, an unglycosylated membrane protein, and a
CC nucleocapsid protein, respectively. ORFs 2 to 4 encode proteins with the
CC characteristics of membrane associated proteins. The polynucleotides of
CC the invention, encode a protein that is at least 88%, but less than 100%
CC homologous to one of proteins encoded by one of the ORFs of these
CC sequences. The polynucleotides of the invention, and their encoded
CC polypeptides can be used in a vaccine to protect a pig against PRRSV.
CC Antibodies raised against the polypeptides can be used to treat a pig
CC suffering from PRRSV, and to assay for a PRRSV
XX Sequence 18 BP; 8 A; 4 C; 3 G; 3 T; 0 U; 0 Other;
XX Query Match 0.9%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 63;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      397 CATTCTGTTGGCAATTG 414
Db      18 CATTCTGTTGGCAATTG 1

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RESULT 83
AAT80016/c
ID AAT80016 standard; DNA; 18 BP.
XX
AC AAT80016;
XX
AC AAT80016;
XX
DT 24-OCT-1997 (first entry)
XX
DE Primer DP586 for ORFs 1b-7 of PRRSV.
XX
KW Porcine reproductive and respiratory syndrome virus; PRRSV; coronavirus;
KW reproductive failure; pneumonia; pig; preweaning mortality; torovirus;
KW subgenomic mRNA; glycosylated membrane protein; nucleocapsid protein;
KW membrane associated protein; vaccine; antibody; therapy; primer; amplify;
KW polymerase chain reaction; PCR; ss.
XX
OS Synthetic.
XX
PN WO9640932-A1.
XX
PD 19-DEC-1996.
XX
PF 07-JUN-1996; 96WO-US008962.
XX
PR 07-JUN-1995; 95US-00478316.
XX
PA (PAUL/) PAUL P S.
XX
PA (MENG/) MENG X.
XX
PA (HALB/) HALBUR P.
XX
PA (MORO/) MOROZOV I.
XX
PI Paul PS, Meng X, Halbur P, Morozov I;
XX
XX WPI; 1997-108646/10.
XX
PT Porcine reproductive and respiratory syndrome virus DNA sequences -
PT useful for diagnosis, treatment and prevention of infection in pigs.
XX
PS Example 2; Page 81; 114pp; English.
XX
AAAT79997-T80016 represent amplification primers for ORFs 1b-7 of porcine
CC reproductive and respiratory syndrome virus (PRRSV). The amplified
CC sequences can be used in the polynucleotides of the invention. PRRSV is a
CC new and severe disease in swine, characterised by reproductive failure in
CC sows and gilts, pneumonia in young growing pigs, and an increase in
CC preweaning mortality. However, there are marked differences in
CC pathogenicity between isolates (with ISU3927 being the least virulent
CC isolate known). The genomic organisation of PRRSV resembles coronaviruses
CC and toroviruses, in that their replication involves the formation of a 3'
CC -terminal nested set of subgenomic mRNAs. ORFs 5, 6, and 7 encode a
CC glycosylated membrane protein, an unglycosylated membrane protein, and a
CC nucleocapsid protein, respectively. ORFs 2 to 4 encode proteins with the
CC characteristics of membrane associated proteins. The polynucleotides of
CC the invention, encode a protein that is at least 88%, but less than 100%
CC homologous to one of proteins encoded by one of the ORFs of these
CC sequences. The polynucleotides of the invention, and their encoded
CC polypeptides can be used in a vaccine to protect a pig against PRRSV.
CC Antibodies raised against the polypeptides can be used to treat a pig
CC suffering from PRRSV, and to assay for a PRRSV
XX
SQ Sequence 18 BP; 4 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 233 GGCATGTGTCTCAGGCATC 250
DB 18 GGCATGTGTCTCAGGCATC 1

RESULT 84

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AAX00179
ID AAX00179 standard; DNA; 18 BP.
XX
AC AAX00179;
XX
DT 23-MAR-1999 (first entry)
XX
DE Porcine reproductive and respiratory syndrome virus PCR primer #1.
XX
KW Equine arteritis virus; EAV; vaccine; structural gene; PRRSV;
KW porcine reproductive and respiratory syndrome virus; recombinant virus;
KW PCR primer; ss.
XX
OS Synthetic.
XX
OS Porcine reproductive and respiratory syndrome virus.
XX
PN WO9855626-A2.
XX
PD 10-DEC-1998.
XX
PF 05-JUN-1998; 98WO-US012141.
XX
PR 05-JUN-1997; 97US-0048662P.
XX
PA (ORIG-) ORIGIN INC.
XX
PI Spatz SJ, Coussens PM, Reilly JD;
XX
XX WPI; 1999-080829/07.
XX
PT New recombinant porcine reproductive and respiratory syndrome virus -
PT containing nucleic acid encoding a polymerase from an RNA virus and open
PT reading frames 2-7 of the porcine virus, used particularly in vaccines.
XX
PS Example 5; Page 29; 55pp; English.
XX
CC The present invention describes a nucleic acid which encodes a polymerase
CC from an RNA virus, excluding porcine reproductive and respiratory
CC syndrome virus (PRRSV), and open reading frames (ORFs) 2-7 of PRRSV. The
CC use of a polymerase gene from RNA viruses can provide for production of
CC less mutagenic recombinant viruses. The recombinant viruses can be used
CC in vaccines which have a reduced risk of loss or reduction of efficacy.
CC The vaccines are used particularly for protecting swine against PRRSV.
CC The high fidelity RNA polymerase gene can be used as a marker that allows
CC organisms vaccinated with such a vaccine to be distinguished from
CC organisms naturally infected with wild type strains of virus or other
CC vaccines. The present sequence represents a PCR primer used in an example
CC from the present invention
XX
SQ Sequence 18 BP; 5 A; 3 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 999 GTTTCAGCGGGAACAATGG 1016
DB 1 GTTTCAGCGGGAACAATGG 18

RESULT 85
ADG14070/c
ID ADG14070 standard; DNA; 18 BP.
XX
AC ADG14070;
XX
DT 26-FEB-2004 (first entry)
XX
DE Porcine reproductive and respiratory syndrome virus PCR primer 37.
XX
KW porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;
KW immunoprotective; vaccine; ISU-55;
KW porcine reproductive and respiratory disease; PCR; primer; ss.

```



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XX SQ Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 0.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 868 CTAAGGGCAGACTCTATC 885
DB 18 CTAAGGGCAGACTCTATC 1
RESULT 88
ADG14117/c
ID ADG14117 standard; DNA; 18 BP.
XX AC ADG14117;
XX DT 26-FEB-2004 (first entry)
XX DE Porcine reproductive and respiratory syndrome virus PCR primer 7.
XX DE porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;
XX KW immunoprotective; vaccine; ISU-55;
XX KW porcine reproductive and respiratory disease; PCR; primer; ss.
XX OS Porcine reproductive and respiratory syndrome virus.
XX PN WO9939582-A1.
XX PD 12-AUG-1999.
XX PF 08-FEB-1999; 99WO-US002630.
XX PR 06-FEB-1998; 98US-00019793.
XX PA (IOWA ) UNIV IOWA STATE RES FOUND INC.
XX PA (AMCY ) AMERICAN CYANAMID CO.
XX PI Paul PS, Zhang Y;
XX DR WPI; 1999-527293/44.
XX XX Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) DNA sequences
XX PT and protein products.
XX PS Example 1; Page 49; 214pp; English.
XX CC This invention relates to novel DNA and polypeptide sequences (ISU-55) of
XX CC a porcine reproductive and respiratory syndrome virus (PRRSV). The
XX CC invention may allow development of compounds with antiviral or
XX CC immunoprotective activity or a vaccine. The ISU-55 polypeptides can be
XX CC used to induce antibodies against PRRSV effective to induce the
XX CC antibodies in a pig. Compositions comprising the ISU-55 polypeptides can
XX CC be used as vaccines to protect pigs from a porcine reproductive and
XX CC respiratory disease. The ISU-55 polypeptides can be used to induce
XX CC antibodies in pigs.
XX SQ Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 0.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 868 CTAAGGGCAGACTCTATC 885
DB 18 CTAAGGGCAGACTCTATC 1
RESULT 89
ADG14066/c
ID ADG14066 standard; DNA; 18 BP.
XX AC ADG14066;
XX DT 26-FEB-2004 (first entry)
XX DE Porcine reproductive and respiratory syndrome virus PCR primer 50.
XX DE porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;
XX KW immunoprotective; vaccine; ISU-55;
XX KW porcine reproductive and respiratory disease; PCR; primer; ss.
XX OS Porcine reproductive and respiratory syndrome virus.
XX PN WO9939582-A1.
XX PD 12-AUG-1999.
XX PF 08-FEB-1999; 99WO-US002630.
XX PR 06-FEB-1998; 98US-00019793.
XX PA (IOWA ) UNIV IOWA STATE RES FOUND INC.
XX PA (AMCY ) AMERICAN CYANAMID CO.
XX PI Paul PS, Zhang Y;
XX DR WPI; 1999-527293/44.
XX XX Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) DNA sequences
XX PT and protein products.
XX PS Example 1; Page 49; 214pp; English.
XX CC This invention relates to novel DNA and polypeptide sequences (ISU-55) of
XX CC a porcine reproductive and respiratory syndrome virus (PRRSV). The
XX CC invention may allow development of compounds with antiviral or
XX CC immunoprotective activity or a vaccine. The ISU-55 polypeptides can be
XX CC used to induce antibodies against PRRSV effective to induce the
XX CC antibodies in a pig. Compositions comprising the ISU-55 polypeptides can
XX CC be used as vaccines to protect pigs from a porcine reproductive and
XX CC respiratory disease. The ISU-55 polypeptides can be used to induce
XX CC antibodies in pigs.
XX SQ Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 0.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 868 CTAAGGGCAGACTCTATC 885
DB 18 CTAAGGGCAGACTCTATC 1
RESULT 89
ADG14066/c
ID ADG14066 standard; DNA; 18 BP.
XX AC ADG14066;
XX DT 26-FEB-2004 (first entry)
XX DE Porcine reproductive and respiratory syndrome virus PCR primer 50.
XX DE porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;
XX KW immunoprotective; vaccine; ISU-55;
XX KW porcine reproductive and respiratory disease; PCR; primer; ss.
XX OS Porcine reproductive and respiratory syndrome virus.
XX PN WO9939582-A1.
XX PD 12-AUG-1999.
XX PF 08-FEB-1999; 99WO-US002630.
XX PR 06-FEB-1998; 98US-00019793.
XX PA (IOWA ) UNIV IOWA STATE RES FOUND INC.
XX PA (AMCY ) AMERICAN CYANAMID CO.
XX PI Paul PS, Zhang Y;
XX DR WPI; 1999-527293/44.
XX XX Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) DNA sequences
XX PT and protein products.
XX PS Example 1; Page 49; 214pp; English.
XX CC This invention relates to novel DNA and polypeptide sequences (ISU-55) of
XX CC a porcine reproductive and respiratory syndrome virus (PRRSV). The
XX CC invention may allow development of compounds with antiviral or
XX CC immunoprotective activity or a vaccine. The ISU-55 polypeptides can be
XX CC used to induce antibodies against PRRSV effective to induce the
XX CC antibodies in a pig. Compositions comprising the ISU-55 polypeptides can
XX CC be used as vaccines to protect pigs from a porcine reproductive and
XX CC respiratory disease. The ISU-55 polypeptides can be used to induce
XX CC antibodies in pigs.
XX SQ Sequence 18 BP; 8 A; 4 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 0.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 397 CATTCTGTGGCAATTG 414
DB 18 CATTCTGTGGCAATTG 1
RESULT 90
ADG14083/c
ID ADG14083 standard; DNA; 18 BP.
XX AC ADG14083;
XX DT 26-FEB-2004 (first entry)
XX DE Porcine reproductive and respiratory syndrome virus PCR primer 50.
XX DE porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;
XX KW immunoprotective; vaccine; ISU-55;
XX KW porcine reproductive and respiratory disease; PCR; primer; ss.
XX OS Porcine reproductive and respiratory syndrome virus.
XX PN WO9939582-A1.
XX PD 12-AUG-1999.
XX PF 08-FEB-1999; 99WO-US002630.
XX PR 06-FEB-1998; 98US-00019793.
XX PA (IOWA ) UNIV IOWA STATE RES FOUND INC.
XX PA (AMCY ) AMERICAN CYANAMID CO.
XX PI Paul PS, Zhang Y;
XX DR WPI; 1999-527293/44.
XX XX Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) DNA sequences
XX PT and protein products.
XX PS Example 2; Page 71; 214pp; English.
XX CC This invention relates to novel DNA and polypeptide sequences (ISU-55) of
XX CC a porcine reproductive and respiratory syndrome virus (PRRSV). The
XX CC invention may allow development of compounds with antiviral or
XX CC immunoprotective activity or a vaccine. The ISU-55 polypeptides can be
XX CC used to induce antibodies against PRRSV effective to induce the
XX CC antibodies in a pig. Compositions comprising the ISU-55 polypeptides can
XX CC be used as vaccines to protect pigs from a porcine reproductive and
XX CC respiratory disease. The ISU-55 polypeptides can be used to induce
XX CC antibodies in pigs.
XX SQ Sequence 18 BP; 8 A; 4 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 0.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 397 CATTCTGTGGCAATTG 414
DB 18 CATTCTGTGGCAATTG 1
RESULT 90
ADG14083/c
ID ADG14083 standard; DNA; 18 BP.
XX AC ADG14083;
XX DT 26-FEB-2004 (first entry)
XX DE Porcine reproductive and respiratory syndrome virus PCR primer 50.
XX DE porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;
XX KW immunoprotective; vaccine; ISU-55;
XX KW porcine reproductive and respiratory disease; PCR; primer; ss.
XX OS Porcine reproductive and respiratory syndrome virus.
XX PN WO9939582-A1.
XX PD 12-AUG-1999.
XX PF 08-FEB-1999; 99WO-US002630.
XX PR 06-FEB-1998; 98US-00019793.
XX PA (IOWA ) UNIV IOWA STATE RES FOUND INC.
XX PA (AMCY ) AMERICAN CYANAMID CO.
XX PI Paul PS, Zhang Y;
XX DR WPI; 1999-527293/44.
XX XX Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) DNA sequences
XX PT and protein products.
XX PS Example 2; Page 71; 214pp; English.
XX CC This invention relates to novel DNA and polypeptide sequences (ISU-55) of
XX CC a porcine reproductive and respiratory syndrome virus (PRRSV). The
XX CC invention may allow development of compounds with antiviral or
XX CC immunoprotective activity or a vaccine. The ISU-55 polypeptides can be
XX CC used to induce antibodies against PRRSV effective to induce the
XX CC antibodies in a pig. Compositions comprising the ISU-55 polypeptides can
XX CC be used as vaccines to protect pigs from a porcine reproductive and
XX CC respiratory disease. The ISU-55 polypeptides can be used to induce
XX CC antibodies in pigs.
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PF 08-FEB-1999; 99WO-US0002630.
XX
PR 06-FEB-1998; 98US-00019793.
XX
PA (IOWA ) UNIV IOWA STATE RES FOUND INC.
PA (AMCY ) AMERICAN CYANAMID CO.
XX
PI Paul PS, Zhang Y;
XX
XX WPI; 1999-527293/44.
DR
XX
XX Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) DNA sequences
PT and protein products.
XX
PS Example 2; Page 71; 214pp; English.
XX
XX This invention relates to novel DNA and polypeptide sequences (ISU-55) of
CC a porcine reproductive and respiratory syndrome virus (PRRSV). The
CC invention may allow development of compounds with antiviral or
CC immunoprotective activity or a vaccine. The ISU-55 polypeptides can be
CC used to induce antibodies against PRRSV effective to induce the
CC antibodies in a pig. Compositions comprising the ISU-55 polypeptides can
CC be used as vaccines to protect pigs from a porcine reproductive and
CC respiratory disease. The ISU-55 polypeptides can be used to induce
CC antibodies in pigs.
XX
SQ Sequence 18 BP; 4 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 0.9%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 63;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 233 GGCAATGTGTTCAGGCATC 250
DB 18 GGCAATGTGTTCAGGCATC 1
RESULT 91
ADR77900/C
ID ADR77900 standard; DNA; 19 BP.
XX
XX ADR77900;
AC
XX
DT 16-DEC-2004 (first entry)
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2385.
XX
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
OS Homo sapiens.
XX
XX WO2004080406-A2.
XX
PD 23-SRP-2004.
XX
XX 08-MAR-2004; 2004WO-US0007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.

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PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
PA
XX Manoharan M, Bumcrot D;
XX WPI; 2004-677362/66.
DR
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 2385; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
CC can be used to control ApoB gene expression.
XX
SQ Sequence 19 BP; 6 A; 3 C; 3 G; 7 T; 0 U; 0 Other;
Query Match 0.9%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 284 CAACATGTCAAGGAATTT 301
DB 18 CAACATGTCAAGGAATTT 1
RESULT 92
ADR80788/C
ID ADR80788 standard; DNA; 19 BP.
XX
XX ADR80788;
AC
XX
XX 16-DEC-2004 (first entry)
DT
XX
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 5287.
XX
KW antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;
KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;

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KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
OS  
XX  
XX Homo sapiens.  
PN WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
PA  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 5287; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
XX Sequence 19 BP; 6 A; 3 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.9%; Score 18; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 71;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 284 CAACATGTCACGGAATTT 301  
Db 18 CAACATGTCACGGAATTT 1  
|||  
RESULT 93  
ADR78130/c  
ID ADR78130 standard; DNA; 19 BP.  
XX  
XX AC ADR78130;  
XX  
XX DT 16-DEC-2004 (first entry)  
XX  
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 2615.  
XX  
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
OS  
XX  
XX Homo sapiens.  
PN WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
PR 12-MAR-2003; 2003US-0454265P.  
PR 13-MAR-2003; 2003US-0454962P.  
PR 13-MAR-2003; 2003US-0455050P.  
PR 14-APR-2003; 2003US-0462894P.  
PR 17-APR-2003; 2003US-0463772P.  
PR 25-APR-2003; 2003US-0465665P.  
PR 25-APR-2003; 2003US-0465802P.  
PR 09-MAY-2003; 2003US-0469612P.  
PR 08-AUG-2003; 2003US-0493986P.  
PR 11-AUG-2003; 2003US-0494597P.  
PR 26-SEP-2003; 2003US-0506341P.  
PR 09-OCT-2003; 2003US-0510246P.  
PR 10-OCT-2003; 2003US-0510318P.  
PR 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
PA  
XX Manoharan M, Bumcrot D;  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
PT disease, diabetes, cancer or neurological disease, comprises sense  
PT sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 2615; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
CC sense sequence and an antisense sequence, where the sense sequences have  
CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
CC sequences have one or more asymmetrical phosphorothioate modifications  
CC and the antisense sequence targets a human gene sequence. Also described  
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
CC stabilising (I), involves selecting a sequence with activity and  
CC introducing one or more asymmetrical modification in the sequence, where  
CC the modification decreases nuclease sensitivity while not decreasing its  
CC activity; a kit comprising (I) and instruction for its use; and a device  
CC that can be dispense or administer a composition comprising (I). (I) is  
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
CC The subject is suffering from a disorder characterised by elevated or  
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
CC inhibit hepatic glucose production or for treating glucose-metabolism-  
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
CC lung cancer), neurological disease (e.g., Huntington disease or  
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.  
XX  
XX Sequence 19 BP; 6 A; 3 C; 3 G; 7 T; 0 U; 0 Other;

CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 3 C; 3 G; 7 T; 0 U; 0 Other;  
 Query Match 0.9%; Score 18; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 71;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 284 CAACATGTCAGGAATTT 301  
 DB 18 CAACATGTCAGGAATTT 1

RESULT 94  
 ADR80558/c  
 ID ADR80558 standard; DNA; 19 BP.  
 XX  
 AC ADR80558;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 5055.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytotatic; anticonvulsant; nootropic; muscular; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.

PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.  
 XX  
 PI Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 XX  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 XX sequence and antisense sequence which has specific modifications.  
 XX  
 PT Example 5; SEQ ID NO 5055; 378pp; English.  
 PT  
 PT The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 6 A; 3 C; 3 G; 7 T; 0 U; 0 Other;  
 Query Match 0.9%; Score 18; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 71;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 284 CAACATGTCAGGAATTT 301  
 DB 18 CAACATGTCAGGAATTT 1

RESULT 95  
 ABK15606/c  
 ID ABK15606 standard; DNA; 21 BP.  
 XX  
 AC ABK15606;  
 XX  
 DT 08-MAY-2002 (first entry)  
 XX  
 DE PRRSV ORF 2 PCR primer PB613.  
 XX  
 PR ss; PCR; primer; PB613; PRRSV; virucide; immunostimulant;  
 KW porcine reproductive and respiratory syndrome virus; ORF2; pJP105;  
 KW pJP115.  
 XX  
 OS Porcine reproductive and respiratory syndrome virus.  
 XX  
 PN WO200189559-A2.

XX PD 29-NOV-2001.  
 XX PF 18-MAY-2001; 2001WO-IB000870.  
 XX PR 24-MAY-2000; 2000US-0206655P.  
 XX PA (MERI-) MERIAL.  
 XX PI Audonnet JF, Bublot MJM, Perez JM, Baudu PGN;  
 XX WPI; 2002-188163/24.  
 XX CC New recombinant avipox virus comprising a DNA complementary to genomic  
 PT RNA from porcine reproductive and respiratory syndrome virus (PRRSV),  
 PT useful for inducing immune response against, and treating or preventing  
 PT PRRSV infections.  
 XX Example 3; Page 28; 85pp; English.  
 XX CC The invention relates to a recombinant avipox virus (e.g. canarypox  
 CC virus) comprising a DNA complementary to genomic RNA from porcine  
 CC reproductive and respiratory syndrome virus (PRRSV). Also included are an  
 CC immunological composition for inducing an immunological response in a  
 CC host, comprising a carrier and at least one recombinant avipox virus, a  
 CC vaccine against PRRS comprising a recombinant avipox virus and a carrier  
 CC and a pig vaccine composition comprising at least one other vaccine  
 CC against one other pig pathogen. Compositions comprising the recombinant  
 CC virus is useful for inducing immunological response against PRRSV gene  
 CC products, and for treating or preventing diseases caused by porcine  
 CC reproductive and respiratory syndrome virus. The present sequence is a  
 CC PCR primer used to clone the PRRSV ORF 2 (open reading frame 2) into  
 CC pJPI05 (resulting in pJPI15), a canarypox virus vector where the C6L open  
 CC reading frame is deleted and replaced with a multiple cloning site  
 CC flanked by transcription and translation termination signals (from  
 CC vaccinia virus)  
 XX Sequence 21 BP; 10 A; 4 C; 6 G; 1 T; 0 U; 0 Other;  
 Query Match 0.9%; Score 17.8; DB 1; Length 21;  
 Best Local Similarity 90.5%; Pred. No. 93;  
 Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 172 GCTTCTCTTCTGCTTTCTA 192  
 DB 21 GCTTCTGCTGCTTTCTA 1  
 RESULT 96  
 AAA27838/c  
 ID AAA27838 standard; DNA; 19 BP.  
 XX AC AAA27838;  
 XX DT 06-AUG-2003 (revised)  
 DT 12-SEP-2000 (first entry)  
 DE North American PRRS virus ORF7-based PCR primer.  
 XX North American PRRS virus; Nidovirales virus; pig; swine; vaccine;  
 KW PCR primer; ss.  
 XX Porcine reproductive and respiratory syndrome virus.  
 OS EP1018557-A2.  
 PN 12-JUL-2000.  
 XX 25-NOV-1999; 99EP-00309409.  
 PF 22-DEC-1998; 98US-0113345P.  
 XX (PFIZ ) PFIZER PROD INC.

XX Calvert JG, Welch SW, Sheppard MG;  
 PI WPI; 2000-444364/39.  
 XX New polynucleotide encoding an infectious RNA molecule of a North  
 PT American porcine reproductive and respiratory syndrome virus for use as a  
 PT vaccine in protecting swine and other animals from infection by a  
 PT pathogen.  
 XX Example 5; Page 21; 53pp; English.  
 XX CC The present sequence is that of a PCR primer complementary to nucleotides  
 CC 14991-14999 within ORF7 of the North American porcine reproductive and  
 CC respiratory syndrome (PRRS) virus P129A genome (see AAA27809). The primer  
 CC was used in a PCR process for the deletion of ORF4 (membrane glycoprotein  
 CC gene) from the North American PRRS virus genome. This genetically  
 CC modified virus was used as a replication-defective vaccine. The invention  
 CC relates to polynucleotide molecules, plasmids, viral vectors and  
 CC transfect host cells that comprise North American PRRS DNA. It also  
 CC relates to polynucleotide molecules, viral vectors and transfect host  
 CC cells encoding a genetically modified North American PRRS virus that is  
 CC disabled in its ability to cause PRRS, or which encodes 1 or more  
 CC heterologous antigenic epitopes, for use as a vaccine. (Updated on 06-AUG  
 CC -2003 to correct OS field.)  
 XX Sequence 19 BP; 0 A; 9 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 17.4; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred. No. 85;  
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1635 AGAGGCAAGGACCGGAA 1653  
 DB 19 AGAGGCAAGGACCGGCA 1  
 RESULT 97  
 AAQ63589  
 ID AAQ63589 standard; DNA; 22 BP.  
 XX AC AAQ63589;  
 XX DT 25-MAR-2003 (revised)  
 DT 12-DEC-1994 (first entry)  
 DE ISU-12 ORF 7 primer #1.  
 XX Primer; polymerase chain reaction; PCR; amplify; probe; Iowa strain;  
 KW infectious agent; porcine respiratory and reproductive syndrome; ISU-12;  
 KW vaccine; porcine respiratory and reproductive disease; PRRD; antibody;  
 KW assay; ss.  
 XX Synthetic.  
 XX EP595436-A2.  
 XX 04-MAY-1994.  
 PD 29-OCT-1993; 93EP-00203042.  
 PF 30-OCT-1992; 92US-00969071.  
 PR 05-OCT-1993; 93US-00131625.  
 XX (SOLV ) SOLVAY ANIMAL HEALTH INC.  
 PA (IOWA ) UNIV IOWA STATE RES FOUND INC.  
 XX Paul PS, Halbur PG, Meng X, Lum MA, Lyoo YS;  
 PI WPI; 1994-146025/18.  
 XX New porcine respiratory and reproductive disease virus - used to prepare  
 PT vaccines and antibodies for diagnosis, treatment and prophylaxis of virus



```
PT infection.
XX
XX Example 4; Page 26; 98pp; English.
XX
XX The sequences given in AA063585-90 are primers which were used in the
CC amplification of ORF-5, ORF-6 and ORF-7 of the infectious agent
CC associated with the Iowa strain of porcine respiratory and reproductive
CC syndrome, termed ISU-12. The isolated ISU-12 sequence may be used to
CC infect cells and from these, the vaccine of the invention can be
CC produced. This vaccine may be used for protecting pigs against a porcine
CC respiratory and reproductive disease (PRRD). Antibodies to the vaccine
CC may also be used in treating PRRD and for assaying for the virus.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 22 BP; 5 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 17.2; DB 1; Length 22;
Best Local Similarity 86.4%; Pred. No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1510 GGTAAACCTTGTGTTAAATATGCC 1531
Db 1 GGGGATCCTTGTGTTAAATATGCC 22
RESULT 98
AAAT1402
ID AAT14402 standard; DNA; 22 BP.
XX
AC AAT14402;
XX
DT 05-AUG-1996 (first entry)
XX
DE PRRSV VR 2385 ORF-7 PCR primer.
XX
XX Porcine reproductive and respiratory syndrome virus; PRRSV; vaccine;
KW antigen; baculovirus; vector; Hi-Five; insect; polymerase chain reaction;
KW PCR; primer; ss.
XX
XX Synthetic.
XX
XX WO9606619-A1.
XX
XX 07-MAR-1996.
XX
XX 01-SEP-1995; 95WO-US010904.
XX
XX 01-SEP-1994; 94US-00301435.
XX
XX (PAUL/) PAUL P S.
XX (MENG/) MENG X.
XX (HALB/) HALBUR P.
XX (MORO/) MOROZOV I.
XX (LJUM/) LJUM M A.
XX
XX Paul PS, Meng X, Halbur P, Morozov I, Lum MA;
XX WPI; 1996-160132/16.
XX
XX New porcine reproductive and respiratory syndrome virus DNA - and
XX PT proteins encoded by open reading frames of an Iowa strain of the virus;
XX PT are used in vaccines against PRRSV in pigs.
XX
XX Disclosure; Page 71; 228pp; English.
XX
XX 2 Primers (AAT14402 and AAT14403) were used to amplify ORF-7 (see also
XX CC AAT14392) of porcine reproductive and respiratory syndrome virus (PRRSV)
XX CC Iowa strain isolate ISU-12 (VR 2385). ORF-5 (AAT14390) was amplified
XX CC using 2 other primers (AAT14398-99) and ORF-6 (AAT14391) using 2 further
XX CC primers (AAT14400-01). Amplified fragments were cloned into baculovirus
XX CC transfer vector pVL1393 and used for prodn. of recombinant Iowa strain
XX CC infectious agent proteins (ORF5-7 products, see also AAR94701-03) in Hi-
XX CC Five insect cells. These proteins can be used in subunit vaccines against
```

```
CC PRRSV in pigs
XX
XX Sequence 22 BP; 5 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 17.2; DB 1; Length 22;
Best Local Similarity 86.4%; Pred. No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1510 GGTAAACCTTGTGTTAAATATGCC 1531
Db 1 GGGGATCCTTGTGTTAAATATGCC 22
RESULT 99
AAV57775/c
ID AAV57775 standard; DNA; 22 BP.
XX
AC AAV57775;
XX
DT 18-NOV-1998 (first entry)
XX
DE Human chromosome 18 PCR mapping primer clone 38f.
XX
XX Manic-depressive illness; susceptibility; genotype; diagnosis;
KW chromosomal marker; polymorphic marker; chromosome 18; human;
KW myo-inositol monophosphatase protein; IMP-18p; PCR primer; ss.
XX
XX Synthetic.
XX
XX Homo sapiens.
XX
XX WO9818963-A1.
XX
XX 07-MAY-1998.
XX
XX 28-OCT-1997; 97WO-US019381.
XX
XX 28-OCT-1996; 96US-0029278P.
XX
XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
XX Detera-Wadleigh SD, Gerehon ES, Badner JA, Goldin LR;
XX Berrettini WH, Yoshikawa T, Sanders AR, Esterling LE;
XX WPI; 1998-272247/24.
XX
XX New isolated IMP.18p myo-inositol monophosphatase - used to develop
XX PT products for determining susceptibility to manic depressive illness and
XX PT as targets for preventive and therapeutic treatments.
XX
XX Example 5; Page 71; 118pp; English.
XX
XX A method has been developed for determining a genotype associated with
XX CC increased susceptibility to manic-depressive (MD) illness. The method
XX CC comprises determining the genotype of an affected individual with at
XX CC least one polymorphic marker localised within the chromosomal region
XX CC defined by and including markers D18S843 and D18S869 and determining the
XX CC genotype associated with increased susceptibility to MD illness. The
XX CC method can be used for determining susceptibility to MD illness including
XX CC bipolar disorder, genetic counselling of individuals from families
XX CC affected with MD illness, and aid in the differential diagnosis of MD
XX CC illness from other psychiatric pathologies. Products from the present
XX CC invention can also be used to obtain modulators of IMP.18p myo-inositol
XX CC monophosphatase protein activity and as targets for preventive and
XX CC therapeutic treatments. The present sequence represents a PCR primer used
XX CC in the mapping of human chromosome 18 for determining the genotype of MD
XX CC illness susceptibility, used in an example from the present invention
XX
XX Sequence 22 BP; 8 A; 6 C; 3 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 17.2; DB 1; Length 22;
Best Local Similarity 86.4%; Pred. No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
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QY 558 TTGACGCTATGTGAGCTGAATG 579
Db 22 TAGACTCTATGTGCTGAATG 1

RESULT 100
ADG14132
ID ADG14132 standard; DNA; 22 BP.
XX
XX ADG14132;
AC
XX
XX 26-FEB-2004 (first entry)
DT
DE Porcine reproductive and respiratory syndrome virus PCR primer 22.
XX
XX porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;
KW immunoprotective; vaccine; ISU-55;
KW porcine reproductive and respiratory disease; PCR; primer; ss.
XX
XX Porcine reproductive and respiratory syndrome virus.
OS
XX WO9939582-A1.
PN
XX 12-AUG-1999.
PD
XX
XX 08-FEB-1999; 99WO-US002630.
XX
XX 06-FEB-1998; 98US-00019793.
PR
XX (IOWA ) UNIV IOWA STATE RES FOUND INC.
PA (AMCY ) AMERICAN CYANAMID CO.
XX
XX Paul PS, Zhang Y;
PI
XX WPI; 1999-527293/44.
DR
XX Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) DNA sequences
and protein products.
PT
XX Example 5; Page 91; 214pp; English.
PS
XX This invention relates to novel DNA and polypeptide sequences (ISU-55) of
a porcine reproductive and respiratory syndrome virus (PRRSV). The
CC invention may allow development of compounds with antiviral or
CC immunoprotective activity or a vaccine. The ISU-55 polypeptides can be
CC used to induce antibodies against PRRSV effective to induce the
CC antibodies in a pig. Compositions comprising the ISU-55 polypeptides can
CC be used as vaccines to protect pigs from a porcine reproductive and
CC respiratory disease. The ISU-55 polypeptides can be used to induce
CC antibodies in pigs.
XX
XX Sequence 22 BP; 5 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 17.2; DB 1; Length 22;
Best Local Similarity 86.4%; Pred. No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1510 GGTAAACCTTGTTAAATATGCC 1531
Db 1 GGGGATCCTTGTTAAATATGCC 22

RESULT 101
ACF58467/C
ID ACF58467 standard; DNA; 22 BP.
XX
XX ACF58467;
AC
XX
XX 12-FEB-2004 (first entry)
DT
XX M. hyorhinis target nucleic acid sequence.
DE
XX Autoimmune disease; antibacterial; gene therapy; vaccine;
KW

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KW systemic sclerosis; ribozyme; DNA-RNA hybrid; ds.
XX
XX Mycoplasma hyorhinis.
XX
PN WO2003077870-A2.
XX
XX 25-SEP-2003.
PD
XX
XX 17-MAR-2003; 2003WO-US008020.
PP
XX
XX 15-MAR-2002; 2002US-0364801P.
PR
XX (UYMA-) UNIV MASSACHUSETTS.
XX
XX Doxsey SJ;
PI
XX WPI; 2003-779079/73.
XX
XX An isolated nucleic acid useful for preparing a composition for
PT diagnosing or treating systemic sclerosis.
PT
XX Disclosure; Page 39; Opp; English.
PS
XX The invention relates to new strains of M. hyorhinis that are causative
CC agents for autoimmune disease. The M. hyorhinis nucleic acids are useful
CC for preparing a composition for diagnosing or treating an animal with
CC systemic sclerosis, e.g. mouse, rat, dog, cat, pig, sheep, goat, cow,
CC horse, human or bird. Sequences ACF58459-67 represent M. hyorhinis
CC nucleic acid sequences that are good targets for ribozymes
XX
XX Sequence 22 BP; 0 A; 2 C; 2 G; 10 T; 8 U; 0 Other;
SQ
Query Match 0.8%; Score 17.2; DB 1; Length 22;
Best Local Similarity 86.4%; Pred. No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1653 AAGAAAAATAAGAGAAAAACC 1674
Db 22 AAGAAAAAAACACAGAAAAAAC 1

RESULT 102
ADG14119
ID ADG14119 standard; DNA; 17 BP.
XX
XX ADG14119;
AC
XX
XX 26-FEB-2004 (first entry)
DT
XX Porcine reproductive and respiratory syndrome virus PCR primer 9.
XX
XX Porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;
KW immunoprotective; vaccine; ISU-55;
KW porcine reproductive and respiratory disease; PCR; primer; ss.
XX
XX Porcine reproductive and respiratory syndrome virus.
OS
XX WO9939582-A1.
PN
XX 12-AUG-1999.
PD
XX
XX 08-FEB-1999; 99WO-US002630.
PP
XX
XX 06-FEB-1998; 98US-00019793.
PR
XX (IOWA ) UNIV IOWA STATE RES FOUND INC.
PA (AMCY ) AMERICAN CYANAMID CO.
XX
XX Paul PS, Zhang Y;
PI
XX WPI; 1999-527293/44.
DR
XX Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) DNA sequences
PT

```

PT and protein products.  
XX Example 1; Page 49; 214pp; English.  
XX  
CC This invention relates to novel DNA and polypeptide sequences (ISU-55) of  
CC a porcine reproductive and respiratory syndrome virus (PRRSV). The  
CC invention may allow development of compounds with antiviral or  
CC immunoprotective activity or a vaccine. The ISU-55 polypeptides can be  
CC used to induce antibodies against PRRSV effective to induce the  
CC antibodies in a pig. Compositions comprising the ISU-55 polypeptides can  
CC be used as vaccines to protect pigs from a porcine reproductive and  
CC respiratory disease. The ISU-55 polypeptides can be used to induce  
CC antibodies in pigs.  
XX  
SQ Sequence 17 BP; 4 A; 2 C; 6 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 17; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 77;  
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 194 GCTTCTGAGATGAGTGA 210  
Db 1 GCTTCTGAGATGAGTGA 17  
|||||  
  
RESULT 103  
ADG14079  
ID ADG14079 standard; DNA; 17 BP.  
XX  
AC ADG14079;  
DT 26-FEB-2004 (first entry)  
XX  
DE Porcine reproductive and respiratory syndrome virus PCR primer 46.  
XX  
KW porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;  
KW immunoprotective; vaccine; ISU-55;  
KW porcine reproductive and respiratory disease; PCR; primer; ss.  
XX  
OS Porcine reproductive and respiratory syndrome virus.  
XX  
PN WO9939582-A1.  
XX  
PD 12-AUG-1999.  
XX  
PF 08-FEB-1999; 99WO-US002630.  
XX  
PR 06-FEB-1998; 98US-00019793.  
XX  
PA (IOWA ) UNIV IOWA STATE RES FOUND INC.  
PA (AMCY ) AMERICAN CYANAMID CO.  
XX  
PI Paul PS, Zhang Y;  
XX  
DR WPI; 1999-527293/44.  
XX  
PT Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) DNA sequences  
PT and protein products.  
XX  
PS Example 2; Page 71; 214pp; English.  
XX  
CC This invention relates to novel DNA and polypeptide sequences (ISU-55) of  
CC a porcine reproductive and respiratory syndrome virus (PRRSV). The  
CC invention may allow development of compounds with antiviral or  
CC immunoprotective activity or a vaccine. The ISU-55 polypeptides can be  
CC used to induce antibodies against PRRSV effective to induce the  
CC antibodies in a pig. Compositions comprising the ISU-55 polypeptides can  
CC be used as vaccines to protect pigs from a porcine reproductive and  
CC respiratory disease. The ISU-55 polypeptides can be used to induce  
CC antibodies in pigs.  
XX  
SQ Sequence 17 BP; 4 A; 2 C; 6 G; 5 T; 0 U; 0 Other;  
  
Query Match 0.8%; Score 17; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 77;  
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 194 GCTTCTGAGATGAGTGA 210  
Db 1 GCTTCTGAGATGAGTGA 17  
|||||  
  
RESULT 104  
ABK57064/c  
ID ABK57064 standard; RNA; 17 BP.  
XX  
AC ABK57064;  
XX  
DT 02-JUL-2002 (first entry)  
XX  
DE Human CLCA1 gene enzymatic nucleic acid #1435.  
XX  
KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;  
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;  
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;  
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;  
KW acetylcysteine.  
XX  
OS Homo sapiens.  
XX  
PN WO200211674-A2.  
XX  
PD 14-FEB-2002.  
XX  
PF 09-AUG-2001; 2001WO-US024970.  
XX  
PR 09-AUG-2000; 2000US-0224383P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (SYNT ) SYNTEX USA LLC.  
PA (THOM/) THOMPSON J.  
XX  
PI Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;  
PI Grupe A;  
XX  
DR WPI; 2002-217145/27.  
XX  
PT Enzymatic polynucleotide that down regulates expression of chloride  
PT channel calcium activated gene, useful for treating Chronic obstructive  
PT pulmonary disease (COPD), chronic bronchitis and asthma.  
XX  
PS Claim 4; Page 94; 152pp; English.  
XX  
CC The invention relates to enzymatic nucleic acid molecules that down  
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes  
CC by cleaving RNA derived from the genes. The nucleic acid sequences are  
CC useful as pharmaceutical agents for treating conditions such as chronic  
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic  
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions  
CC that are related to or will respond to the levels of CLCA1 in a cell or  
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,  
CC hence, are useful for treatment of a patient having a condition  
CC associated with the level of CLCA1, where the invention further comprises  
CC the use of one or more therapies under conditions suitable for the  
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,  
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The  
CC nucleic acids of the invention are also used as diagnostic tools to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of CLCA1 RNA in a cell. This sequence represents an  
CC enzymatic nucleic acid molecule of the invention  
XX  
SQ Sequence 17 BP; 4 A; 5 C; 5 G; 0 T; 3 U; 0 Other;  
  
Query Match 0.8%; Score 17; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 77;  
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
OY 1587 CAGCTGTGCGACATGCT 1603
DB |||||
17 CAGCTGTGCGACATGCT 1

RESULT 105
ABL44312/c
ID ABL44312 standard; DNA; 22 BP.
XX
XX
AC ABL44312;
XX
XX 11-APR-2002 (first entry)
DT
DE
DE Human chromosome 1p36-35 PCR primer SEQ ID NO:1356.
XX
XX Human chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
KW PCR primer; ss.
XX
XX Homo sapiens.
OS
XX
PN JP2001321190-A.
XX
XX 20-NOV-2001.
PD
XX
XX 12-MAR-2001; 2001JP-00068285.
PF
XX
XX 10-MAR-2000; 2000JP-00066716.
PR
XX
XX (RIKA ) RIKAGAKU KENKYUSHO.
PA
PA (GENO-) GENOTEX YG.
XX
XX WPI; 2002-144136/19.
DR
XX
XX
PT Arraying genome clones.
XX
XX Claim 4; Page 31; 528pp; Japanese.
XX
XX The present invention describes a method of arraying genome clones. The
CC method comprises: (a) clones of the genomic libraries contained in
CC multiwell plates numbered for discrimination are mixed in each of the
CC multiwell plates; (b) a primer designed based on the chromosome marker
CC sequence is added to the mixture to carry out an amplification reaction;
CC (c) a signal corresponding to the marker is detected from the resultant
CC amplified product to specify the discrimination Nos. of the multiwell
CC plates containing the clones having said marker sequence; (d) the order
CC of the markers is changed so that the same discrimination Nos. succeed to
CC the maximum in the specified discrimination Nos. to array the multiwell
CC plates; (e) the clones in the multiwell plates of the specified
CC discrimination Nos. are mixed respectively in each wells of longitudinal
CC and lateral directions; (f) the mixed clones are cultured and the
CC resultant cultures are amplified by using the above primer; (g) signals
CC are detected from the amplified products; (h) the clones in the multiwell
CC plates are specified from the detected result; and (i) the clones are
CC reconstructed as the positions on the chromosome and arrayed. The
CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent
CC PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
CC represent PCR primers for human chromosome 21q22.1, which are
CC specifically claimed for use in the present invention
XX
XX Sequence 22 BP; 7 A; 3 C; 6 G; 6 T; 0 U; 0 Other;
Query Match 0.8%; Score 16.8; DB 1; Length 22;
Best Local Similarity 90.0%; Pred. No. 1.4e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1284 CCTGGAATTCATCACTCC 1303
DB |||||
21 CCTGGAATTCATCACTTC 2

RESULT 106
ADQ28254/c
OY 1587 CAGCTGTGCGACATGCT 1603
DB |||||
17 CAGCTGTGCGACATGCT 1

RESULT 107
AA06739
ID AA06739 standard; DNA; 20 BP.
XX
XX
AC AA06739;
XX
XX 26-APR-1999 (first entry)
DT
DE Human JAGGED1 gene intron 21-exon 22 boundary.
XX
XX JAGGED1; JAGGED1; hJAGGED1; human; notch ligand; stem cell;
KW progenitor cell; haematopoiesis; cell differentiation; Alegille syndrome;
KW leukaemia; lymphoma; diagnosis; therapy; ss.

ADQ28254 standard; DNA; 22 BP.
ADQ28254;
XX
XX 09-SEP-2004 (first entry)
DT
XX
XX Cardiac alpha-MHC gene expression analysis 5' PCR primer.
DE
XX biocompatible implant; medicament; injury site; angiogenesis;
KW cardiovascular repair material; primer; ss.
XX
XX Rattus sp.
OS
XX WO2004050133-A2.
PN
XX 17-JUN-2004.
PD
XX
XX 05-DEC-2003; 2003WO-JP015641.
PF
XX
XX 05-DEC-2002; 2002JP-00354342.
PR
XX 11-SEP-2003; 2003JP-00320491.
PR
XX
XX (CARD-) RADIO INC.
PA
XX
XX Matsuda H, Sawa Y, Taketani S, Iwai S, Hirakawa K;
PI
XX WPI; 2004-487475/46.
XX
XX Biocompatible implant useful for treating injured site of body,
PT reinforcing organ or tissue within body, producing or regenerating organ
PT or tissue, comprises biological molecule, and support.
XX
XX Example 24; SEQ ID NO 5; 267pp; English.
XX
XX The invention relates to a biocompatible implant (I) comprising a
CC biological molecule, and a support. (I) is useful for producing
CC medicament for treating injured site within a body or for producing
CC medicament for reinforcement of an organ or tissue within a body. A
CC device containing (I) is useful for treating an injured site of a body,
CC reinforcing an organ or tissue within a body, producing or regenerating
CC an organ or tissue, producing a medicament for treating an injured site
CC within a body, and medicament for reinforcing an organ or tissue within a
CC body. In an example a biocompatible implant is placed in rats with a
CC substance to treat myocardial infarctions. After treatment, the rat
CC hearts were extracted and expression analysis of cardiac genes and their
CC controls were carried out by PCR. This sequence represents a primer to
CC determine the level of expression of the alpha-major histocompatibility
CC (MHC) actin gene.
XX
XX Sequence 22 BP; 7 A; 6 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 16.8; DB 1; Length 22;
Best Local Similarity 90.0%; Pred. No. 1.4e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 49 CTCGGCCTCTGAGGCGATTC 68
DB |||||
22 CTCGGCCTCTGAGGCTATTC 3

RESULT 107
AA06739
ID AA06739 standard; DNA; 20 BP.
XX
XX
AC AA06739;
XX
XX 26-APR-1999 (first entry)
DT
DE Human JAGGED1 gene intron 21-exon 22 boundary.
XX
XX JAGGED1; JAGGED1; hJAGGED1; human; notch ligand; stem cell;
KW progenitor cell; haematopoiesis; cell differentiation; Alegille syndrome;
KW leukaemia; lymphoma; diagnosis; therapy; ss.
```

```

XX OS Homo sapiens.
XX FH Key
XX FT intron
XX FT Location/Qualifiers
XX FT 1. .10
XX FT /*tag= a
XX FT /note= "3' end of intron 21"
XX FT 11. .20
XX FT /*tag= b
XX FT /note= "5' end of exon 22 (exon length is 110 bp)"
XX FT
XX PN W09858958-A2.
XX PD 30-DEC-1998.
XX PF 25-JUN-1998; 98WO-US013207.
XX PR 25-JUN-1997; 97US-00882046.
XX PA (UNIW ) UNIV WASHINGTON.
XX PA (CHIL-) CHILDRENS HOSPITAL PHILADELPHIA.
XX PI Li L, Hood L, Krantz ID, Spinner NB;
XX PF; 1999-081220/07.
XX PN
XX FT New Jagged peptides for inhibiting differentiation of progenitor cells -
XX FT also used for maintaining these cells in undifferentiated state, e.g. for
XX FT haematopoietic reconstitution.
XX PF
XX PF Example 4; Fig 6B; 101pp; English.
XX CC This nucleotide sequence comprises the intron 21-exon 22 boundary of the
XX CC human JAGGED1 gene. 47 Intron/exon boundaries have been defined (see
XX CC AAX06701-47) by comparison of genomic sequences from bacterial artificial
XX CC chromosome 49D9 and an isolated cDNA clone (see AAY63753). Exon 22
XX CC corresponds to nucleotides 2986-3095 of the hJAGGED1 cDNA. hJAGGED1 (see
XX CC also AAW87894) is a Notch ligand capable of inhibiting the
XX CC differentiation of haematopoietic progenitor cells. Mutation of the
XX CC hJAGGED1 gene is associated with Alagille syndrome. The Jagged1 gene has
XX CC been mapped to human chromosome 20p12
XX PF
XX PF Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
XX PF
XX PF Query Match 0.8%; Score 16.4; DB 1; Length 20;
XX PF Best Local Similarity 94.4%; Pred. No. 1.3e+02;
XX PF Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX PF
XX QY 1799 CCTGTCAGATTCAGGGAG 1816
XX DB |||||
XX DB 3 CCTGTCAGTTTCAGGGAG 20
XX
XX RESULT 108
XX ID AAQ89224 standard; cDNA; 21 BP.
XX AC AAQ89224;
XX XX
XX DT 25-MAR-2003 (revised)
XX DT 20-OCT-1995 (first entry)
XX DE Opioid receptor PCR primer.
XX XX
XX KW Mu opioid receptor; MOR-1; gene therapy; diagnostic; primer;
XX KW polymerase chain reaction; PCR; ss.
XX OS Synthetic.
XX PN W09507983-A1.
XX XX
XX PD 23-MAR-1995.
XX CC

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```

PP PF 13-SEP-1994; 94WO-US010358.
XX XX
XX PR 13-SEP-1993; 93US-00120601.
XX PA (INDV ) UNIV INDIANA FOUND.
XX PI Yu L;
XX XX
XX DR WPI; 1995-131351/17.
XX XX
XX PT New nucleic acid encoding new human mu opioid receptor - and related
XX PT vectors, transformed cells, antibodies etc., useful in diagnosis,
XX PT treatment and drug screening.
XX PF
XX PF Example 1; Page 96; 266pp; English.
XX XX
XX CC Primers given in AAQ89224-25 are based on the mouse delta opioid receptor
XX CC third transmembrane domain and third cytoplasmic loop, respectively. They
XX CC were used to amplify cDNA from a rat brain library. Amplified cDNA was
XX CC used to screen the library further, and a clone encoding a rat mu opioid
XX CC receptor (AAR71964) was isolated. (Updated on 25-MAR-2003 to correct PN
XX CC field.)
XX PF
XX PF Sequence 21 BP; 5 A; 8 C; 2 G; 6 T; 0 U; 0 Other;
XX PF
XX PF Query Match 0.8%; Score 16.2; DB 1; Length 21;
XX PF Best Local Similarity 85.7%; Pred. No. 1.5e+02;
XX PF Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX PF
XX QY 1880 AGCATCACCCCTCAGCATGATG 1900
XX DB | | | | | | | | | | | | | | | |
XX DB 1 ATCTTCACCCCTCACCATGATG 21
XX
XX RESULT 109
XX ID AAQ82198 standard; DNA; 21 BP.
XX AC AAQ82198;
XX DT 25-MAR-2003 (revised)
XX DT 05-SEP-1995 (first entry)
XX DE Chromosome 11 (locus D11S1083) STS primer cSRL-3c4-tz.
XX KW sequence sampled mapping; genomic analysis; complex genome mapping;
XX KW cosmid library; chromosome 11; sequence tagged site; STS analysis; ss.
XX OS Synthetic.
XX PN W09429486-A1.
XX XX
XX PD 22-DEC-1994.
XX PF 15-JUN-1994; 94WO-US006810.
XX XX
XX PR 15-JUN-1993; 93US-00078471.
XX PR 07-SEP-1993; 93US-00117952.
XX XX
XX PA (SALK ) SALK INST BIOLOGICAL STUDIES.
XX XX
XX PI Evans GA, Smith MW;
XX XX
XX DR WPI; 1995-036508/05.
XX XX
XX PT Sequencing complex genomes, present as fragments in a cosmid library - by
XX PT sequencing end-specific nucleotides of each clone then correlating with
XX PT spatial relationship of cosmid, esp. for mammalian chromosomes.
XX OS Synthetic.
XX PF
XX PF Example 4; Page 70; 128pp; English.
XX XX
XX CC Sequences were determined from the ends of chromosome 11-specific cosmids
XX CC by automated sequencing without intermediate subcloning. A sample of 371

```



XX Complementary nucleic acid; gene analysis; polymorphism; variation;  
KW DNA chip; primer; ss.  
XX Unidentified.  
XX EP1065278-A2.  
XX 03-JAN-2001.  
XX 07-JUN-2000; 2000EP-00112235.  
XX 07-JUN-1999; 99JP-00159339.  
XX (FUJIF) FUJIFILM CO LTD.  
XX Makino Y, Abe Y, Ogawa M, Takagi M, Takenaka S, Yamashita K;  
XX WPI; 2001-140003/15.  
XX Determining complementarity of nucleotide fragment for gene analysis, by  
PT comparing flow of electric current from or to electroconductive substrate  
PT through DNA fragment, with reference obtained from its complement.  
XX Example 1; Page 12; 28pp; English.  
XX The present invention provides a method for analysing a nucleic acid  
CC strand to determine the degree of complementarity between two sequences.  
CC This involves the measurement of an electric current along the annealed  
CC strands compared to a standard. This is useful in the analysis of genetic  
CC polymorphisms and variation between genes  
XX Sequence 21 BP; 1 A; 0 C; 0 G; 20 T; 0 U; 0 Other;  
SQ Query Match 0.8%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 85.7%; Pred. No. 1.5e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1652 AAGAGAAATATAGAGAGAAAA 1672  
DB 21 AAAAAAAAAAAAAAAAAAAAAA 1  
RESULT 113  
AAD41408  
ID AAD41408 standard; DNA; 21 BP.  
AC AAD41408;  
XX 30-OCT-2002 (first entry)  
XX His tag DNA.  
XX Recombinant vector; coat protein; CP; viral replication; infection;  
KW Zucchini yellow mosaic potyvirus; ZYMV; cucurbit fruit; vaccination;  
KW pharmaceutical; diagnostic; gene; ds.  
XX Synthetic.  
XX Key Location/Qualifiers  
FH CDS 1..21  
FT /\*tag= a  
FT /product= "His tag peptide"  
XX WO20024323-A2.  
XX 06-JUN-2002.  
XX 28-NOV-2001; 2001WO-IL001098.  
XX 28-NOV-2000; 2000US-0253136P.  
XX 27-SEP-2001; 2001US-00963761.  
XX

PA (VIRO-) VIROGENE LTD.  
XX Gal-On A, Shibolet Y, Arazi T, Ilan Y;  
XX WPI; 2002-537446/57.  
XX P-PSDB; AAE25397.  
XX Novel recombinant vector useful for transiently expressing heterologous  
PT peptide in plant comprises potyvirus nucleic acid sequence and  
PT heterologous sequence inserted at amino terminus of potyvirus coat  
PT protein.  
XX Claim 17; Page 57; 61pp; English.  
XX The invention relates to a recombinant vector for expressing a  
CC heterologous peptide at the amino-terminus of a potyvirus coat protein  
CC (CP). The vector includes sufficient potyvirus nucleic acid sequence to  
CC permit viral replication and spread within a plant infected by the  
CC vector. The invention also relates to Zucchini yellow mosaic potyvirus  
CC (ZYMV) AGII strain CP and its corresponding nucleic acid sequence. The  
CC recombinant vector is useful for transiently expressing a portion of the  
CC heterologous peptide in a plant. It is also useful for infecting a  
CC cucurbit fruit, is useful as a source of material for vaccination,  
CC pharmaceutical or diagnostic application. The present sequence is a his  
CC tag peptide encoding DNA. The peptide is used to fuse to the N-terminus  
CC of ZYMV AGII strain CP  
XX Sequence 21 BP; 7 A; 10 C; 0 G; 4 T; 0 U; 0 Other;  
SQ Query Match 0.8%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 85.7%; Pred. No. 1.5e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
QY 1876 TCACAGCATCACCTCAGCAT 1896  
DB 1 TCACAGCATCACCTCAGCAT 21  
RESULT 114  
ABX79794/c  
ID ABX79794 standard; cDNA; 21 BP.  
XX AC ABX79794;  
XX 17-APR-2003 (first entry)  
XX EST polymorphic DNA repeat polynucleotide #119.  
XX EST; expressed sequence tag; ss; polymorphic repeat; tandem repeat;  
KW polymorphic marker prediction of ubiquitous simple sequences; POMPOUS;  
KW Rep-X; human; genetic disease; drug-treatment; Machado-Joseph;  
KW Haw River syndrome; Huntington's disease; fragile-X syndrome;  
KW Fredreich's ataxia; myotonic dystrophy; hyperandrogenaemia;  
KW spinal atrophy; bulbar atrophy; spinocerebellar ataxia.  
XX Homo sapiens.  
XX US6472154-B1.  
XX 29-OCT-2002.  
XX 31-DEC-1999; 99US-00475947.  
XX 31-DEC-1999; 99US-00475947.  
XX (TEXA) UNIV TEXAS SYSTEM.  
XX Garner HR, Wren JD, Minna JD, Fondon JW;  
XX WPI; 2003-208818/20.  
XX Identifying a candidate polymorphic repeat within a coding sequence, for  
PT understanding or treating genetic disease, comprises detecting tandem

PT repeats in a target coding sequence and scoring the repeats for  
PT polymorphic probability.

XX Example; Col 495; 589pp; English.

XX The invention discloses a method for identifying a candidate polymorphic  
CC repeat within a coding sequence (expressed sequence tag, EST), which  
CC comprises detecting tandem repeats in a target coding sequence, scoring  
CC the repeats for polymorphic probability and generating a dataset  
CC correlating the repeats with polymorphic probability to identify a  
CC candidate polymorphic repeat. The computational methods (polymorphic  
CC marker prediction of ubiquitous simple sequences, POMPOUS, and Rep-X) are  
CC useful for identifying and detecting candidate polymorphic repeats in  
CC human genes, which can be used to understand, treat or eliminate genetic  
CC diseases, predispositions or adverse drug-treatment reactions. Examples  
CC of diseases linked to nucleotide repeats are Machado-Joseph, Haw River  
CC myotonic dystrophy, hyperandrogenemia, fragile-X syndrome, Friedrich's ataxia,  
CC spinocerebellar ataxia. The sequences presented in ABX79676-ABX80022 are  
CC the polymorphic repeats identified for a search of human ESTs

XX Sequence 21 BP; 1 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.8%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 85.7%; Pred. No. 1.5e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1652 AAGAAAAATAGAGAAAAA 1672

DB 21 AAAAAAAAAATAAAAAAAAAA 1

RESULT 115

ADH94423/C  
ID ADH94423 standard; DNA; 21 BP.

XX ADH94423;

DT 22-APR-2004 (first entry)

XX Human gene PCR primer #1268.

XX human; gene sequence; single nucleotide polymorphism; SNP;  
KW disease diagnosis; ss; PCR; primer.

XX Homo sapiens.

XX JP2003174883-A.

XX 24-JUN-2003.

PF 11-DEC-2001; 2001JP-00377637.

XX 11-DEC-2001; 2001JP-00377637.

XX (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.

XX WPI; 2003-819215/77.

XX Polynucleotide for detecting single nucleotide polymorphisms existing in  
PT human gene, contains isolated human gene having specified sequence.

XX Claim 2; SEQ ID NO 2260; 529pp; Japanese.

XX The invention comprises isolated human gene sequences and PCR primer  
CC sequences which can be used to detect single nucleotide polymorphisms  
CC (SNPs). The DNA sequences of the invention are useful for detecting SNPs  
CC existing in human genes and for the diagnosis of human disease. The  
CC present DNA sequence represents a human gene PCR primer of the invention.

XX Sequence 21 BP; 0 A; 9 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 0.8%; Score 16.2; DB 1; Length 21;

Best Local Similarity 85.7%; Pred. No. 1.5e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1548 CAGCAGACAGAGAGAGGGG 1568

DB 21 CAGCAGACAGAGAGAGGGG 1

RESULT 116

ADQ92770/C  
ID ADQ92770 standard; DNA; 21 BP.

XX ADQ92770;

DT 21-OCT-2004 (first entry)

XX Androgen receptor target oligonucleotide, SEQ ID 346.

XX Endocrine; Antiseborrheic; Dermatological; Depilatory; RNA interference;  
KW small interfering RNA; siRNA;  
KW androgen signal transduction pathway protein;  
KW androgen signal transduction; androgen receptor; hair loss;  
KW hyperandrogenic condition; androgenic alopecia; male pattern alopecia;  
KW acne vulgaris; seborrhea; female hirsutism; prostatic hypertrophy;  
KW human; ss.

XX Homo sapiens.

XX WO2004063331-A2.

XX 29-JUL-2004.

XX 05-JAN-2004; 2004WO-US000128.

PR 03-JAN-2003; 2003US-0437842P.

XX (GENC-) GENCIA CORP.

XX Kahn S;

XX WPI; 2004-561892/54.

XX Inhibitory nucleic acid that inhibits expression of an androgen signal  
PT transduction pathway protein useful for treating hair loss, comprises a  
PT double stranded RNA having a partial sequence encoding a pathway protein  
PT in one strand.

Claim 11; Page 41; 92pp; English.

XX The present invention relates to novel small interfering RNAs (siRNAs),  
CC comprising a double stranded RNA, where one strand comprises a partial  
CC nucleic acid sequence of an androgen signal transduction pathway protein,  
CC and where the double-stranded RNA inhibits translation of mRNA encoding  
CC the nucleic acid sequence of the androgen signal transduction pathway  
CC protein thereby blocking the androgen signal transduction pathway. The  
CC androgen signal transduction pathway protein is chosen from isoforms I  
CC and II of 5-alpha reductase (ADQ92425 and ADQ92516), the androgen  
CC receptor (ADQ92571), aromatase (ADQ92896), 3-alpha-  
CC hydroxysteroid dehydrogenase (ADQ93182), 3-beta-  
CC hydroxysteroid dehydrogenase (ADQ93360), 3-beta-  
CC hydroxysteroid dehydrogenase-4-5-isomerase (ADQ93541), 17-beta-  
CC hydroxysteroid oxidoreductase (ADQ93722), and steroid sulfatase  
CC (ADQ93770). The siRNAs of the invention are useful for reducing hair loss  
CC in a mammal which involves contacting several mammal's hair cells with  
CC the siRNA, where the siRNA interferes with the translation of mRNA of the  
CC androgen signal transduction protein. The siRNAs are useful for treating  
CC hyperandrogenic conditions of androgenic alopecia, including male pattern  
CC alopecia, acne vulgaris, seborrhea, and female hirsutism and prostatic  
CC hypertrophy. The present sequence is a target sequence which was used to  
CC generate the siRNAs of the invention.

XX Sequence 21 BP; 5 A; 6 C; 3 G; 7 T; 0 U; 0 Other;



Query Match 0.8%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 85.7%; Pred. No. 1.5e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1890 TCAGCATGATGGCTGGCATT 1910  
DB 21 TCAGAAAGATGGCTGACATT 1

RESULT 117  
ADQ92772  
ID ADQ92772 standard; RNA; 21 BP.  
XX  
AC ADQ92772;  
XX  
XX 21-OCT-2004 (first entry)  
XX  
XX Androgen receptor siRNA antisense strand, SEQ ID 348.  
XX  
XX Endocrine; Antiseborrheic; Dermatological; Depilatory; RNA interference;  
KW small interfering RNA; siRNA;  
KW androgen signal transduction pathway protein;  
KW androgen signal transduction; androgen receptor; hair loss;  
KW hyperandrogenic condition; androgenic alopecia; male pattern alopecia;  
KW acne vulgaris; seborrhea; female hirsutism; prostatic hypertrophy; ds.  
XX  
OS Synthetic.

PH Key Location/Qualifiers  
FT misc\_feature 20..21  
FT /\*tag= a  
FT /note= "2 deoxynucleotide overhang"  
XX  
XX WO2004063331-A2.  
XX  
XX 29-JUL-2004.  
XX  
XX 05-JAN-2004; 2004WO-US000128.  
XX  
XX 03-JAN-2003; 2003US-0437842P.  
XX  
XX (GENC-) GENCIA CORP.  
XX  
XX Kahn S;  
XX  
XX WPI; 2004-561892/54.  
XX  
XX Inhibitory nucleic acid that inhibits expression of an androgen signal  
PT transduction pathway protein useful for treating hair loss, comprises a  
PT double stranded RNA having a partial sequence encoding a pathway protein  
PT in one strand.  
XX  
XX Claim 11; Page 41; 92pp; English.

XX The present invention relates to novel small interfering RNAs (siRNAs),  
CC comprising a double stranded RNA, where one strand comprises a partial  
CC nucleic acid sequence of an androgen signal transduction pathway protein,  
CC and where the double-stranded RNA inhibits translation of mRNA encoding  
CC the nucleic acid sequence of the androgen signal transduction pathway  
CC protein thereby blocking the androgen signal transduction pathway. The  
CC androgen signal transduction pathway protein is chosen from isozyms I  
CC and II of 5-alpha reductase (ADQ92425 and ADQ92516), the androgen  
CC receptor (ADQ92571), aromatase (ADQ92896), 3-alpha-  
CC hydroxysteroiddehydrogenase (ADQ93182), 3-beta-  
CC hydroxysteroiddehydrogenase-4-5-isomerase (ADQ93541), 17-beta-  
CC hydroxysteroidoxidoreductase (ADQ93722), and steroid sulfatase  
CC (ADQ93770). The siRNAs of the invention are useful for reducing hair loss  
CC in a mammal which involves contacting several mammal's hair cells with  
CC the siRNA, where the siRNA interferes with the translation of mRNA of the  
CC androgen signal transduction protein. The siRNAs are useful for treating  
CC hyperandrogenic conditions of androgenic alopecia, including male pattern  
CC alopecia, acne vulgaris, seborrhea, and female hirsutism and prostatic

CC hypertrophy. The present sequence is the antisense strand for one such  
CC siRNA of the invention.  
XX  
SQ Sequence 21 BP; 7 A; 3 C; 6 G; 2 T; 3 U; 0 Other;  
Query Match 0.8%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 71.4%; Pred. No. 1.5e+02;  
Matches 15; Conservative 3; Mismatches 3; Indels 0; Gaps 0;

QY 1890 TCAGCATGATGGCTGGCATT 1910  
DB 1 UCAGAAAGATGGCTGACATT 21

RESULT 118  
AAT14404/c  
ID AAT14404 standard; DNA; 16 BP.  
XX  
XX AAT14404;  
XX  
XX 05-AUG-1996 (first entry)  
XX  
XX PRRSV sequencing primer DP966.  
XX  
XX Porcine reproductive and respiratory syndrome virus; PRRSV; vaccine;  
KW antigen; polymerase chain reaction; PCR; primer; ss.  
XX  
XX Synthetic.  
XX  
XX WO9606619-A1.  
XX  
XX 07-MAR-1996.  
XX  
XX 01-SEP-1995; 95WO-US010904.  
XX  
XX 01-SEP-1994; 94US-00301435.  
XX  
XX (PAUL/) PAUL P S.  
XX (MENG/) MENG X.  
XX (HALE/) HALBUR P.  
XX (MORO/) MOROZOV I.  
XX (LUMM/) LUM M A.  
XX  
XX Paul PS, Meng X, Halbur P, Morozov I, Lum MA;  
XX WPI; 1996-160132/16.  
XX  
XX New porcine reproductive and respiratory syndrome virus DNA - and  
PT proteins encoded by open reading frames of an Iowa strain of the virus;  
PT are used in vaccines against PRRSV in pigs.  
XX  
XX Disclosure; Page 77; 228pp; English.

XX Primer DP966 (AAT14404) is specific to porcine reproductive and  
CC respiratory syndrome virus (PRRSV). It was used with other sequencing  
CC primers (AAT14381-82) to determine the sequences of the putative membrane  
CC (M) and nucleocapsid (N) genes of PRRSV isolate ISU-12 (see also AAT14391  
CC -92) and of 5 other American PRRSV isolates (AAT14405-09) and European  
CC strain Lelystad (AAT14410)  
XX  
SQ Sequence 16 BP; 2 A; 4 C; 6 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 16; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 93;  
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1674 CCGGAGAGCCGCCATT 1689  
DB 16 CCGGAGAGCCGCCATT 1

RESULT 119  
ABK56212/c

ID ABK56212 standard; RNA; 17 BP.  
XX  
AC ABK56212;  
XX  
DT 02-JUL-2002 (first entry)  
XX  
DE Human CLCA1 gene enzymatic nucleic acid #583.  
XX  
DE Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;  
KW antinflammatory; chronic obstructive pulmonary disease; COPD; asthma;  
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;  
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;  
KW acetylcysteine.  
XX  
OS Homo sapiens.  
XX  
PN WO200211674-A2.  
XX  
PD 14-FEB-2002.  
XX  
PF 09-AUG-2001; 2001WO-US024970.  
XX  
PR 09-AUG-2000; 2000US-0224383P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (SYNT ) SYNTEX USA LLC.  
PA (THOM/) THOMPSON J.  
XX  
PI Thompson J, Mcswiggen J, Mckenzie T, Ayers D, Szymkowski DE;  
PI Grupe A;  
XX  
DR WPI; 2002-217145/27.  
XX  
DR Enzymatic polynucleotide that down regulates expression of chloride  
PT channel calcium activated gene, useful for treating Chronic obstructive  
PT pulmonary disease (COPD), chronic bronchitis and asthma.  
XX  
PS Claim 4; Page 64; 152pp; English.  
XX  
CC The invention relates to enzymatic nucleic acid molecules that down  
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes  
CC by cleaving RNA derived from the genes. The nucleic acid sequences are  
CC useful as pharmaceutical agents for treating conditions such as chronic  
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic  
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions  
CC that are related to or will respond to the levels of CLCA1 in a cell or  
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,  
CC hence, are useful for treatment of a patient having a condition  
CC associated with the level of CLCA1, where the invention further comprises  
CC the use of one or more therapies under conditions suitable for the  
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,  
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The  
CC nucleic acids of the invention are also used as diagnostic tools to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of CLCA1 RNA in a cell. This sequence represents an  
CC enzymatic nucleic acid molecule of the invention  
XX  
SQ Sequence 17 BP; 5 A; 5 C; 4 G; 0 T; 3 U; 0 Other;  
Query Match 0.8%; Score 16; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 1.1e+02;  
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1586 TCAGCTGTGCCAGATG 1601  
DB 16 TCAGCTGTGCCAGATG 1  
RESULT 120  
ABK57509/c  
ID ABK57509 standard; RNA; 17 BP.  
XX  
AC ABK57509;

XX  
DT 02-JUL-2002 (first entry)  
XX  
DE Human CLCA1 gene enzymatic nucleic acid #1880.  
XX  
DE Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;  
KW antinflammatory; chronic obstructive pulmonary disease; COPD; asthma;  
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;  
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;  
KW acetylcysteine.  
XX  
OS Homo sapiens.  
XX  
PN WO200211674-A2.  
XX  
PD 14-FEB-2002.  
XX  
PF 09-AUG-2001; 2001WO-US024970.  
XX  
PR 09-AUG-2000; 2000US-0224383P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (SYNT ) SYNTEX USA LLC.  
PA (THOM/) THOMPSON J.  
XX  
PI Thompson J, Mcswiggen J, Mckenzie T, Ayers D, Szymkowski DE;  
PI Grupe A;  
XX  
DR WPI; 2002-217145/27.  
XX  
DR Enzymatic polynucleotide that down regulates expression of chloride  
PT channel calcium activated gene, useful for treating Chronic obstructive  
PT pulmonary disease (COPD), chronic bronchitis and asthma.  
XX  
PS Claim 4; Page 127; 152pp; English.  
XX  
CC The invention relates to enzymatic nucleic acid molecules that down  
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes  
CC by cleaving RNA derived from the genes. The nucleic acid sequences are  
CC useful as pharmaceutical agents for treating conditions such as chronic  
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic  
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions  
CC that are related to or will respond to the levels of CLCA1 in a cell or  
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,  
CC hence, are useful for treatment of a patient having a condition  
CC associated with the level of CLCA1, where the invention further comprises  
CC the use of one or more therapies under conditions suitable for the  
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,  
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The  
CC nucleic acids of the invention are also used as diagnostic tools to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of CLCA1 RNA in a cell. This sequence represents an  
CC enzymatic nucleic acid molecule of the invention  
XX  
SQ Sequence 17 BP; 5 A; 5 C; 4 G; 0 T; 3 U; 0 Other;  
Query Match 0.8%; Score 16; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 1.1e+02;  
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1588 AGCTGTGCCAGATGCT 1603  
DB 17 AGCTGTGCCAGATGCT 2  
RESULT 121  
AAX09829/c  
ID AAX09829 standard; DNA; 20 BP.  
XX  
AC AAX09829;  
XX  
DT 24-MAR-1999 (first entry)  
XX

DE Human biallelic polymorphic marker downstream primer #135.  
 XX Polymorphism; biallelic; human; forensic; paternity testing; disease;  
 KW detection; phenotypic typing; characteristic; infection; hereditary;  
 KW autoimmune disease; cancer; inflammation; drug; therapy; medicament;  
 KW treatment; marker; primer; ss.  
 XX Synthetic.  
 OS Homo sapiens.  
 OS XX  
 PN WO9820165-A2.  
 XX  
 XX 14-MAY-1998.  
 XX  
 XX 05-NOV-1997; 97WO-US020313.  
 XX  
 XX 06-NOV-1996; 96US-0030455P.  
 XX  
 XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.  
 XX  
 PI Lander ES, Wang D, Hudson T;  
 XX WPI; 1998-286974/25.  
 XX  
 XX New isolated nucleic acid segments from the human genome - used for  
 PT determining polymorphic forms for use in e.g. forensics, paternity  
 PT testing or phenotypic typing for disease.  
 XX  
 PS Claim 16; Page 62; 310pp; English.  
 XX  
 CC AAX09121-X10268 are allele-specific oligonucleotide primers used in the  
 CC isolation of various biallelic polymorphic markers found in the human  
 CC genome (represented in AAX10269-X12937). These primers can be used in a  
 CC method for determining polymorphic forms in an individual for use in e.g.  
 CC forensics, paternity testing or for phenotypic typing for diseases such  
 CC as asagmagbulinemia, diabetes insipidus, Leach-Nyhan syndrome, muscular  
 CC dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial  
 CC hypercholesterolemia, polycystic kidney disease, hereditary  
 CC spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary  
 CC haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos  
 CC syndrome, osteogenesis imperfecta, acute intermittent porphyria,  
 CC autoimmune diseases, inflammation, cancer, diseases of the nervous  
 CC system, infection by pathogenic microorganisms, and characteristics such  
 CC as longevity, appearance (e.g. baldness, obesity), strength, speed,  
 CC endurance, fertility, and susceptibility or receptivity to particular  
 CC drugs or therapeutic treatments. The isolated polymorphic nucleic acid  
 CC segments can also be used to produce medicaments for the treatment or  
 CC prophylaxis of such diseases  
 XX  
 SQ Sequence 20 BP; 0 A; 10 C; 10 G; 10 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 16; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1553 GAAGAGAAGAGGGG 1568  
 Db 16 GAAGAGAAGAGGGG 1  
 RESULT 122  
 ID AAF32254/C  
 XX AAF32254 standard; DNA; 19 BP.  
 AC AAF32254;  
 XX  
 XX 17-APR-2001 (first entry)  
 DT  
 XX Streptomyces sp. cyclic lipopeptide acylase PCR primer SEQ ID NO:11.  
 DE Streptomyces; cyclic lipopeptide acylase; acylase; deacylation;  
 KW acylamino group; PCR primer; ss.  
 XX

OS Streptomyces sp.  
 XX WO200102585-A1.  
 XX 11-JAN-2001.  
 XX 28-JUN-2000; 2000WO-JP004285.  
 XX 02-JUL-1999; 99JP-00189644.  
 XX (FUJI ) FUJISAWA PHARM CO LTD.  
 XX Shibata T, Noguchi Y, Yamashita M;  
 XX WPI; 2001-123114/13.  
 DR  
 XX Gene encoding cyclic lipopeptide acylase genetically engineered to give  
 PT vectors and transformants for expression of protein with comparable  
 PT acylase activity in shorter culture time on large scale.  
 XX  
 PS Example 1; Page 21; 73pp; Japanese.  
 XX  
 CC The present invention describes a Streptomyces sp. cyclic lipopeptide  
 CC acylase. The cyclic lipopeptide acylase gene and its expressed cyclic  
 CC lipopeptide acylase are useful in deacylation of the amino group in the  
 CC acylamino group of a side-chain in a cyclic lipopeptide substance. Cyclic  
 CC lipopeptide acylases are obtainable by genetic modification, have  
 CC comparable acylase activity to the parent and can be produced in shorter  
 CC culture time on large scale. The present sequence represents a PCR primer  
 CC for the Streptomyces sp. cyclic lipopeptide acylase, which is used in an  
 CC example from the present invention  
 XX  
 SQ Sequence 19 BP; 2 A; 7 C; 6 G; 4 T; 0 U; 0 Other;  
 Query Match 0.8%; Score 15.8; DB 1; Length 19;  
 Best Local Similarity 89.5%; Pred. No. 1.4e+02;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 1427 GGCTCCACTACGTCACG 1445  
 Db 19 GGCTCCACGACGTCGTAACG 1  
 RESULT 123  
 ID ADI57146  
 XX ADI57146 standard; DNA; 19 BP.  
 AC ADI57146;  
 XX  
 XX 22-APR-2004 (first entry)  
 DT  
 XX Oryza minuta Pi9 locus nucleotide binding site (NBS) gene PCR primer #63.  
 DE Oryza minuta Pi9 locus nucleotide binding site (NBS) gene PCR primer #63.  
 XX nucleotide binding site; NBS; Pi9 gene; bacterial blight; rice blast;  
 KW plant breeding; transgenic plant; plant; PCR; primer; ss.  
 XX  
 OS Oryza minuta.  
 XX US2004006788-A1.  
 PN  
 XX 08-JAN-2004.  
 PD  
 XX 27-JAN-2003; 2003US-00352179.  
 XX  
 XX 25-JAN-2002; 2002US-0352106P.  
 PR 01-FEB-2002; 2002US-0353304P.  
 XX  
 XX (WANG/) WANG G.  
 PA (LIUG/) LIU G.  
 XX  
 XX Wang G, Liu G;  
 PI WPI; 2004-121064/12.  
 DR



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Db      1 CCCATCGACCTCAAGA 19
RESULT 126
AAC63047
ID AAC63047 standard; DNA; 20 BP.
XX
AC AAC63047;
XX
XX 05-FEB-2001 (first entry)
XX
XX Human IL-1B gene oligonucleotide primer.
XX
XX Generalised onset periodontal disease; interleukin-1alpha; IL-1A;
KW interleukin-1beta; IL-1B; polymorphism; disease diagnosis; ss.
XX
XX Homo sapiens.
XX
XX US6130042-A.
XX
XX 10-OCT-2000.
XX
XX 05-MAR-1998; 98US-00035220.
XX
XX 05-MAR-1998; 98US-00035220.
XX
XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
XX Diehl SR, Schenkein HA, Wang Y;
XX
XX WPI; 2000-637836/61.
XX
XX Predicting or diagnosing (susceptibility to) early-onset periodontal
PT disease comprises detecting genetic polymorphisms of interleukin 1B.
XX
XX Disclosure; Col 15; 30pp; English.
XX
XX The present sequence was used in a method for predicting susceptibility
CC to generalised onset periodontal disease. The method comprises detecting
CC genetic polymorphisms in the interleukin (IL) 1alpha (1A) or 1beta (1B)
CC genes. The high risk genotypes are those where the individual is
CC homozygous for allele 1 for IL-1A or for IL-1B. The method allows early
CC monitoring and therapeutic intervention of generalised onset periodontal
CC disease
XX
XX Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.6e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 11 GCTGTCCTCCAGACATCA 29
Db 2 GGTGTCCTCCAGAAATCA 20
RESULT 127
AAC67699/c
ID AAC67699 standard; DNA; 20 BP.
XX
AC AAC67699;
XX
XX 16-FEB-2001 (first entry)
XX
XX Oligonucleotide #10 ISIS #116878.
XX
XX Antiinflammatory; cytostatic; antibacterial; methionine aminopeptidase 2;
KW inhibitor; MetAP2; eukaryotic initiation factor associated protein; p67;
KW eIF-2; protein synthesis; antisense oligonucleotide; infection; human;
KW inflammation; tumour; phosphorothioate; 2-methoxyethyl wing; ss.
XX
XX Homo sapiens.
XX
XX WO200236628-A2.

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PN US6136604-A.
XX
PD 24-OCT-2000.
XX
PF 27-OCT-1999; 99US-00428584.
XX
PR 27-OCT-1999; 99US-00428584.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Monia BP, Wyatt J;
XX
PI WPI; 2001-030942/04.
XX
XX New antisense compounds which specifically hybridize with and inhibit
PT human methionine aminopeptidase 2 expression, useful for treating
PT methionine aminopeptidase 2 related disorders and preventing inflammation
PT or tumor formation.
XX
XX Example 15; Col 41-42; 39pp; English.
XX
XX Methionine aminopeptidase 2 (also known as MetAP2 and eukaryotic
CC initiation factor [eIF-2]) associated protein, p67) is a cellular
CC glycoprotein that promotes protein synthesis in the presence of active
CC eIF-2 kinases by protecting the eIF-2 alpha subunit from phosphorylation.
CC The present invention relates to antisense oligonucleotides (AAC67690-
CC C67767) which inhibit human methionine aminopeptidase 2 coding sequence
CC expression (see AAC67683). The present sequence is one such antisense
CC oligonucleotide. The present sequence may be used for treating a patient
CC suspected of having or being prone to a disease or condition associated
CC with expression of MetAP2. In addition, the present sequence can also be
CC used as research reagents, diagnostics and to distinguish between
CC functions of various members of a biological pathway. The antisense
CC oligonucleotide may further be used prophylactically, e.g. to prevent or
CC delay infection, inflammation or tumour formation. Note: the present
CC sequence may have a phosphorothioate backbone and 2-methoxyethyl (2'-MOE)
CC wings
XX
XX Sequence 20 BP; 0 A; 6 C; 0 G; 14 T; 0 U; 0 Other;
XX
Query Match 0.8%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.6e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1653 AAGAAATAAGAGAAAA 1671
Db 19 AAGAAATAAGAGAGAAGA 1
RESULT 128
ABK89086
ID ABK89086 standard; DNA; 20 BP.
XX
AC ABK89086;
XX
XX 21-OCT-2002 (first entry)
XX
XX Mutant PCR primer, CBProPp102, used to construct IFN beta dimer.
XX
XX Human; PCR; primer; ss; interferon beta; IFN beta; virucide; cytostatic;
KW antiinflammatory; antiulcer; neuroprotective; glycosylation;
KW single chain multimeric interferon beta; cytokine; antiviral;
KW antiproliferative; immunomodulatory; type I interferon; viral infection;
KW cancer; tumour; tumour angiogenesis; carcinoma; cervical dysplasia;
KW Crohn's disease; ulcerative colitis; Guillain-Barre syndrome; glioma;
KW idiopathic pulmonary fibrosis; leukaemia; multiple myeloma;
KW Hodgkin's disease; multiple sclerosis; hepatitis; herpes; interferon 1a;
KW interferon 1b; gene therapy; dimer.
XX
XX Homo sapiens.
XX
XX Synthetic.
XX
XX WO200236628-A2.

```

XX	10-MAY-2002.
XX	PD
XX	PF
XX	PP
XX	PR
XX	PR
XX	PA
XX	(MAXY-) MAXYGEN APS.
XX	Bornaes C, Andersen KV, Rasmussen PB, Pedersen AH;
DR	WPI; 2002-557420/59.
XX	
XX	Single chain multimeric interferon (IFN) beta polypeptide for treating
PT	e.g. viral infections, comprises two linked monomers, where one monomer
PT	is IFN beta monomer with an introduced glycosylation site.
XX	
PS	Example 5; Page 84; 93pp; English.
XX	
CC	The invention discloses a single chain multimeric interferon beta
CC	polypeptide comprising two monomers linked through a peptide bond or a
CC	peptide linker, where one of the monomers is an interferon beta monomer
CC	having an amino acid sequence that differs from that of wild-type human
CC	interferon beta in an introduced glycosylation site. Interferons are
CC	important cytokines characterised by antiviral, antiproliferative and
CC	immunomodulatory activities and interferon beta belong to the type I
CC	class of interferons. The single chain multimeric interferon beta
CC	polypeptide and/or compositions containing the polypeptide are useful for
CC	treating viral infections, cancers, tumours or tumour angiogenesis,
CC	carcinomas, cervical dysplasia, Crohn's disease, ulcerative colitis,
CC	Gullain-Barre syndrome, glioma, idiopathic pulmonary fibrosis,
CC	leukaemia, multiple myeloma, Hodgkin's disease, abnormal cell growth and
CC	immunomodulation in any suitable animal. The polypeptide and/or
CC	compositions are also useful for treating multiple sclerosis, hepatitis
CC	and herpes infection, where the mammal has circulating antibodies against
CC	interferon Ia or Ib. Nucleic acid encoding the polypeptide is useful for
CC	gene therapy applications for treating the above mentioned conditions.
CC	The polypeptide or a conjugate comprising the polypeptide have a number
CC	of improved properties as compared to human interferon beta, including
CC	increased functional in vivo half-life, increased serum half-life,
CC	reduced immunogenicity and/or increased bioavailability. Thus use of the
CC	polypeptide, or conjugate, provides longer duration between injections,
CC	fewer side effects and/or increased efficiency due to reduction in
CC	antibodies. The sequence presented is the mutant PCR primer, CBProPr102,
CC	which was used (with ASK89087) to construct the first monomer of a human
CC	interferon beta (IFN beta) single chain dimer (AAU99389)
XX	
SQ	Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
	Query Match                      0.8%; Score 15.8; DB 1; Length 20;
	Best Local Similarity        89.5%; Pred. No. 1.6e+02;
	Matches 17; Conservative     0; Mismatches    2; Indels    0; Gaps    0;
Qy	1147 GCACCTTTTGGTCCTTCGTG 1165 
Dd	2 GCACCTATTGCTCTACTCG 20 
RESULT 129	
ABZ24228	
ID	ABZ24228 standard; DNA; 20 BP.
XX	
XC	ABZ24228;
DT	
DE	14-APR-2003 (first entry)
XX	
XX	Human LAMAN cDNA sequencing vector primer IC0929.
KW	Lysosomal alpha-mannosidase; rHLAMAN; LAMAN; cerebroprotective; human;
XX	osteopathia; immunostimulant; Gene therapy; PCR; primer; ss.
OS	Homo sapiens.
XX	

FN	WO200299092-A2.
XX	
XX	12-DEC-2002.
XX	
XX	07-JUN-2002; 2002WO-DK000388.
XX	
XX	07-JUN-2001; 2001US-0296142P.
XX	
XX	(HEME-) HEMEBIOTECH AS.
XX	
XX	Fogh J, Irani M, Andersson C, Weigelt C;
XX	
XX	WPI; 2003-167343/16.
XX	
XX	New cell capable of producing recombinant human lysosomal alpha-
XX	mannosidase, useful for the diagnosis, clinical evaluation and detection,
XX	and preparation of a medicament for the treatment of alpha mannosidosis.
XX	
XX	Example 1; Page 20; 70pp; English.
XX	
XX	The invention relates to a new cell capable of producing recombinant
XX	human lysosomal alpha-mannosidase (hLAMAN). The cell comprises the 3066
XX	bp EcoRI-XbaI fragment of a human cDNA which codes for a human LAMAN
XX	protein in which the position corresponding to position 186 of the full
XX	length hLAMAN protein is Aspartic acid. The hLAMAN produced by the
XX	method cited above, is useful for the preparation of a medicament for the
XX	treatment of alpha mannosidosis. They can also be used in the diagnosis,
XX	clinical evaluation and detection of alpha mannosidosis. The present
XX	sequence represents a vector primer for sequencing the human hLAMAN cDNA
XX	
XX	Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
XX	
XX	Query Match 0.8%; Score 15.8; DB 1; Length 20;
XX	Best Local Similarity 89.5%; Pred. No. 1.6e+02;
XX	Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0
XX	
Qy	1147 GCACCTTTTGGTCTTCCTG 1165
Db	2 GCACCTATTGGTCTTACTG 20
XX	
XX	RESULT 130
XX	AAQ63587
ID	AAQ63587 standard; DNA; 21 BP.
XX	
XX	AAQ63587;
XX	
XX	25-MAR-2003 (revised)
DT	12-DEC-1994 (first entry)
XX	
XX	ISU-12 ORF 6 primer #1.
XX	
XX	Primer; polymerase chain reaction; PCR; amplify; probe; Iowa strain;
KW	infectious agent; porcine respiratory and reproductive syndrome; ISU-12;
KW	vaccine; porcine respiratory and reproductive disease; PRRD; antibody;
KW	assay; ss.
XX	
OS	Synthetic.
XX	
XX	EP595436-A2.
XX	
XX	04-MAY-1994.
XX	
XX	29-OCT-1993; 93EP-00203042.
XX	
XX	30-OCT-1992; 92US-00969071.
XX	
XX	05-OCT-1993; 93US-00131625.
XX	
XX	(SOLV ) SOLVAY ANIMAL HEALTH INC.
XX	(IOWA ) UNIV IOWA STATE RES FOUND INC.
XX	
XX	Paul PS, Halbur PG, Meng X, Lum MA, Lyoo YS;
XX	

DR WPI; 1994-146025/10.  
XX  
PT New porcine respiratory and reproductive disease virus - used to prepare  
PT vaccines and antibodies for diagnosis, treatment and prophylaxis of virus  
PT infection.  
XX  
PS Example 4; Page 26; 98pp; English.  
XX  
CC The sequences given in AQ63585-90 are primers which were used in the  
CC amplification of ORF-5, ORF-6 and ORF-7 of the infectious agent  
CC associated with the Iowa strain of porcine respiratory and reproductive  
CC syndrome, termed ISU-12. The isolated ISU-12 sequence may be used to  
CC infect cells and from these, the vaccine of the invention can be  
CC produced. This vaccine may be used for protecting pigs against a porcine  
CC respiratory and reproductive disease (PRRD). Antibodies to the vaccine  
CC may also be used in treating PRRD and for assaying for the virus.  
CC (Updated on 25-MAR-2003 to correct PN field.)  
XX  
SQ Sequence 21 BP; 4 A; 4 C; 9 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 15.8; DB 1; Length 21;  
Best Local Similarity 89.5%; Pred. No. 1.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 990 GTAACACAGAGTTTCAGCGG 1008  
Db 3 GGATCCAGAGTTTCAGCGG 21  
RESULT 131  
AAT14400  
ID AAT14400 standard; DNA; 21 BP.  
AC AAT14400;  
XX  
XX  
DT 05-AUG-1996 (first entry)  
DE PRRSV VR 2385 ORF-6 PCR primer.  
XX  
XX Porcine reproductive and respiratory syndrome virus; PRRSV; vaccine;  
KW antigen; baculovirus; vector; Hi-Five; insect; polymerase chain reaction;  
KW PCR; primer; ss.  
XX  
XX Synthetic.  
XX  
XX WO9606619-A1.  
XX  
PD 07-MAR-1996.  
XX  
XX 01-SEP-1995; 95WO-US010904.  
XX  
XX 01-SEP-1994; 94US-00301435.  
XX  
XX (PAUL/) PAUL P S.  
PA (MENG/) MENG X.  
PA (HALB/) HALBUR P.  
PA (MORO/) MOROZOV I.  
PA (LUMM/) LUM M A.  
XX  
XX Paul PS, Meng X, Halbur P, Morozov I, Lum MA;  
XX WPI; 1996-160132/16.  
XX  
XX New porcine reproductive and respiratory syndrome virus DNA - and  
PT proteins encoded by open reading frames of an Iowa strain of the virus;  
PT are used in vaccines against PRRSV in pigs.  
XX  
XX Disclosure; Page 70; 228pp; English.  
XX  
XX 2 Primers (AAT14400 and AAT14401) were used to amplify ORF-6 (see also  
CC AAT14391) of porcine reproductive and respiratory syndrome virus (PRRSV)  
CC Iowa isolate ISU-12 (VR 2385). ORF-5 (AAT14390) was amplified  
CC using 2 other primers (AAT14398-99) and ORF-7 (AAT14392) using 2 further  
CC

CC primers (AAT14402-03). Amplified fragments were cloned into baculovirus  
CC transfer vector pVLI393 and used for prodn. of recombinant Iowa strain  
CC infectious agent proteins (ORFs-7 products, see also AAR94701-03) in Hi-  
CC Five insect cells. These proteins can be used in subunit vaccines against  
CC PRRSV in pigs. Primer AAT14400 was also used with primer AAT14403 to  
CC amplify the putative M and N genes of PRRSV isolates  
XX  
SQ Sequence 21 BP; 4 A; 4 C; 9 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 15.8; DB 1; Length 21;  
Best Local Similarity 89.5%; Pred. No. 1.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 990 GTAACACAGAGTTTCAGCGG 1008  
Db 3 GGATCCAGAGTTTCAGCGG 21  
RESULT 132  
ADG14130  
ID ADG14130 standard; DNA; 21 BP.  
XX  
XX AC ADG14130;  
XX  
XX DT 26-FEB-2004 (first entry)  
XX  
XX Porcine reproductive and respiratory syndrome virus PCR primer 20.  
DE  
XX Porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;  
KW immunoprotective; vaccine; ISU-55;  
KW porcine reproductive and respiratory disease; PCR; primer; ss.  
XX  
XX Porcine reproductive and respiratory syndrome virus.  
XX  
XX WO9393582-A1.  
XX  
XX 12-AUG-1999.  
XX  
XX 08-FEB-1999; 99WO-US002630.  
XX  
XX 06-FEB-1998; 98US-00019793.  
XX  
XX (IOWA ) UNIV IOWA STATE RES FOUND INC.  
PA (AMCY ) AMERICAN CYANAMID CO.  
XX  
XX Paul PS, Zhang Y;  
XX  
XX WPI; 1999-527293/44.  
XX  
XX Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) DNA sequences  
PT and protein products.  
XX  
XX Example 5; Page 91; 214pp; English.  
XX  
XX This invention relates to novel DNA and polypeptide sequences (ISU-55) of  
CC a porcine reproductive and respiratory syndrome virus (PRRSV). The  
CC invention may allow development of compounds with antiviral or  
CC immunoprotective activity or a vaccine. The ISU-55 polypeptides can be  
CC used to induce antibodies against PRRSV effective to induce the  
CC antibodies in a pig. Compositions comprising the ISU-55 polypeptides can  
CC be used as vaccines to protect pigs from a porcine reproductive and  
CC respiratory disease. The ISU-55 polypeptides can be used to induce  
CC antibodies in pigs.  
XX  
XX Sequence 21 BP; 4 A; 4 C; 9 G; 4 T; 0 U; 0 Other;  
SQ  
Query Match 0.8%; Score 15.8; DB 1; Length 21;  
Best Local Similarity 89.5%; Pred. No. 1.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 990 GTAACACAGAGTTTCAGCGG 1008  
Db 3 GGATCCAGAGTTTCAGCGG 21

```

RESULT 133
ADF75382/c
ID  ADF75382 standard; DNA; 21 BP.
XX
XX  ADF75382;
XX
XX  26-FEB-2004 (first entry)
XX
XX  Human RT-PCR primer to amplify an epigenetically silenced gene (SeqID62).
XX
XX  human; primer; RT-PCR; PCR; ss; epigenetically silenced gene;
XX  tumour suppressor; cancer; proliferative disorder; head and neck cancer;
XX  oesophageal squamous cell carcinoma; ESCC; gene therapy;
XX  methyltransferase inhibitor; 5Aza-dC; histone deacetylase inhibitor.
XX
OS  Homo sapiens.
XX
XX  WO2003076594-A2.
XX
XX  18-SEP-2003.
XX
XX  07-MAR-2003; 2003WO-US007245.
XX
XX  07-MAR-2002; 2002US-0362577P.
XX
XX  (UYUO ) UNIV JOHNS HOPKINS.
XX
XX  Sidransky D;
XX
XX  WPI; 2003-756817/71.
XX
XX  Identifying at least one epigenetically silenced gene associated with
XX  cancer useful for treating cancer comprises contacting an array of genome
XX  with nucleic acid molecule that reactivates expression of epigenetically
XX  silenced gene.
XX
XX  Example 1; SEQ ID NO 62; 97pp; English.
XX
XX  This invention relates to novel methods of screening to identify
XX  epigenetically silenced genes. Specifically, it refers to the detection
XX  of epigenetically silenced tumour suppressor genes in cancer cells, which
XX  are transcriptionally inactive due to aberrant methylation at normally
XX  unmethylated CpG islands. Accordingly, these genes provide diagnostic
XX  markers for immortalised and transformed cells and hence can be used to
XX  diagnose various proliferative disorders, particularly oesophageal cancer
XX  and head and neck cancer. The present invention describes a genomic
XX  screening method to identify silenced genes in a cell suspected of a
XX  predisposition to, or exhibiting, unregulated growth. Accordingly,
XX  oligonucleotides of the genes identified herein are useful for detecting
XX  oesophageal squamous cell carcinoma (ESCC) or neck squamous cell
XX  carcinoma. Furthermore, treatment can occur via gene therapy, using a
XX  demethylation agent such as a methyltransferase inhibitor (5Aza-dC) or a
XX  histone deacetylase inhibitor to restore expression of at least one
XX  methylation silenced gene in cancer cells. This oligonucleotide sequence
XX  is an RT-PCR primer used to amplify those genes that were up-regulated as
XX  a result of treatment with a demethylation agent i.e epigenetically
XX  silenced genes of the invention.
XX
SQ  Sequence 21 BP; 6 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
    Query Match          0.8%; Score 15.8; DB 1; Length 21;
    Best Local Similarity 89.5%; Pred. No. 1.7e+02;
    Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY  322 TGACCATGTGCGGCTGCTC 340
    |||||
DB  20 TGACCATGTGCGGCTGCTC 2
    |||||
RESULT 134
ADR18493/c

```

```

ID  ADR18493 standard; DNA; 21 BP.
XX
XX  ADR18493;
XX
XX  18-NOV-2004 (first entry)
XX
XX  Human GOBLIN siRNA sense strand oligonucleotide SEQ ID NO:274.
XX
XX  cancer; GOBLIN; micrometastasis; metastasis; cytostatic; gene therapy;
XX  squamous cell carcinoma; hepatocellular carcinoma; melanoma;
XX  head and neck cancer; adenocarcinoma; gastrointestinal cancer;
XX  renal cell cancer; bladder cancer; prostate cancer;
XX  non-squamous carcinoma; glioblastoma; medullablastoma; ovarian cancer;
XX  basal cell carcinoma; clear cell carcinoma; endometrioid ovarian cancer;
XX  mucinous ovarian cancer; breast cancer; lobular lesion; stromal lesion;
XX  ductal carcinoma; ductal adenocarcinoma;
XX  proliferative fibrocystic change; epitheliosis; intraductal papilloma;
XX  atypical ductal hyperplasia; hyperproliferative disease; human;
XX  small interfering RNA; siRNA; ss.
XX
OS  Homo sapiens.
OS
XX  Synthetic.
XX
FH  Key Location/Qualifiers
FT  misc_feature 1..19 /*tag= a
FT /*note= "human GOBLIN mRNA target sequence"
FT misc_feature 20..21 /*tag= b
FT /*note= "3'-extension dinucleotide TT overhang"
XX
XX  WO2004072285-A1.
XX
XX  26-AUG-2004.
XX
XX  12-FEB-2004; 2004WO-AU000169.
XX
XX  14-FEB-2003; 2003US-0447697P.
XX
XX  (GARV-) GARVAN INST MEDICAL RES.
XX
XX  Stanford P, Harris J, Ormandy C;
XX
XX  WPI; 2004-625877/60.
XX
XX  Detecting a cancer, e.g. breast or ovarian cancer, in a subject comprises
XX  determining the level of expression of a GOBLIN gene in a sample.
XX
XX  Claim 93; SEQ ID NO 274; 217pp; English.
XX
XX  The present invention describes a method for detecting a cancer cell in a
XX  subject. The method comprises determining the level of expression of a
XX  GOBLIN gene in a sample of the subject where elevated expression of the
XX  gene is indicative of a primary cancer or its micrometastasis or
XX  metastasis. Also described: (1) an isolated GOBLIN nucleic acid molecule;
XX  (2) a vector comprising the isolated nucleic acid of (1); (3) a
XX  monoclonal or polyclonal antibody that binds specifically to a GOBLIN
XX  polypeptide; (4) an isolated GOBLIN polypeptide, or its immunogenic
XX  epitope; (5) a fusion protein comprising the isolated polypeptide of (4);
XX  (6) a method of identifying a compound that reduces or antagonises
XX  expression of a GOBLIN gene; (7) a process for identifying or determining
XX  and producing a compound; (8) an isolated nucleic acid that antagonises
XX  expression of a GOBLIN gene, where the nucleic acid comprises a
XX  nucleotide sequence comprising any of the 21 bp sequences of SEQ ID
XX  NOS:46-353; (9) an isolated antisense nucleic acid that antagonises
XX  expression of a GOBLIN gene, where the nucleic acid comprises a
XX  nucleotide sequence capable of selectively hybridising to mRNA encoded by
XX  the isolated nucleic acid of (1); and (10) a process for monitoring the
XX  efficacy of treatment of a cancer in a subject. GOBLIN sequences have
XX  cytostatic activity, and can be used in gene therapy. An isolated GOBLIN
XX  nucleic acid molecule can be used for detecting a cancer cell. An
XX  isolated GOBLIN polypeptide can be used for producing an antibody. The
XX  method, nucleic acid molecules and the encoded polypeptides, and

```



CC antibodies can be used for detecting a cancer, e.g. squamous cell  
CC carcinoma, hepatocellular carcinoma, melanoma, head and neck cancer,  
CC adenocarcinoma, gastrointestinal cancer (e.g. gastric, colon, or  
CC pancreatic cancer), renal cell cancer, bladder cancer, prostate cancer,  
CC non-squamous carcinoma, glioblastoma, medullablastoma, ovarian cancer  
CC (e.g. basal cell carcinoma, clear cell carcinoma, endometrioid ovarian  
CC cancer, or mucinous ovarian cancer), or breast cancer (e.g. lobular  
CC lesion, stromal lesion, ductal carcinoma, ductal adenocarcinoma,  
CC proliferative fibrocystic change, epithelioid, intraductal papilloma, or  
CC atypical ductal hyperplasia) in a subject. The antagonist of GOBLIN  
CC function, method, and compound are useful for treating hyperproliferative  
CC disease, like cancer. The present sequence represents a small interfering  
CC RNA (siRNA) oligonucleotide targeted to human GOBLIN, which is used in  
CC the exemplification of the present invention.

XX  
SQ Sequence 21 BP; 5 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 15.8; DB 1; Length 21;  
Best Local Similarity 89.3%; Pred. No. 1.7e+02;  
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1580 AGTCAATCAGCTGTGCAG 1598  
||||| |||||||  
DB 20 AGTCAATGCTGTGCAG 2

RESULT 135  
ID ABK56211/c  
XX ID ABK56211 standard; RNA; 17 BP.  
AC ABK56211;  
XX  
DT 02-JUL-2002 (first entry)  
XX  
DE Human CLCA1 gene enzymatic nucleic acid #582.  
XX  
KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;  
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;  
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;  
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;  
KW acetylcysteine.

XX Homo sapiens.  
OS  
XX WO200211674-A2.  
PN  
PD 14-FEB-2002.  
XX  
PF 09-AUG-2001; 2001WO-US024970.  
XX  
PR 09-AUG-2000; 2000US-0224383P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (SYNT) SYNTAX USA LLC.  
PA (THOM/) THOMPSON J.

XX Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;  
PI Grupe A;

DR WPI; 2002-217145/27.

XX Enzymatic polynucleotide that down regulates expression of chloride  
PT channel calcium activated gene, useful for treating Chronic obstructive  
PT pulmonary disease (COPD), chronic bronchitis and asthma.

XX Claim 4; Page 64; 152pp; English.

XX The invention relates to enzymatic nucleic acid molecules that down  
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes  
CC by cleaving RNA derived from the genes. The nucleic acid sequences are  
CC useful as pharmaceutical agents for treating conditions such as chronic  
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic  
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions

CC that are related to or will respond to the levels of CLCA1 in a cell or  
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,  
CC hence, are useful for treatment of a patient having a condition  
CC associated with the level of CLCA1, where the invention further comprises  
CC the use of one or more therapies under conditions suitable for the  
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,  
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The  
CC nucleic acids of the invention are also used as diagnostic tools to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of CLCA1 RNA in a cell. This sequence represents an  
CC enzymatic nucleic acid molecule of the invention

XX Sequence 17 BP; 5 A; 6 C; 4 G; 0 T; 2 U; 0 Other;

Query Match 0.8%; Score 15.4; DB 1; Length 17;  
Best Local Similarity 94.1%; Pred. No. 1.3e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1589 GCTGTGCCAGATGCTGG 1605  
||||| |||||||  
DB 17 GCTGTGCCAGATGCTTG 1

RESULT 136  
ID ABZ60124/c  
XX ID ABZ60124 standard; RNA; 17 BP.

AC ABZ60124;  
XX  
DT 21-MAR-2003 (first entry)  
XX  
DE Human K-Ras DNAzyme substrate #236.

XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;  
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;  
KW anti-rheumatic; cancer; AIDS; ss.

XX Homo sapiens.

OS WO200297114-A2.

XX PD 05-DEC-2002.

XX PF 29-MAY-2002; 2002WO-US016840.

XX PR 29-MAY-2001; 2001US-0294140P.

XX PR 06-JUN-2001; 2001US-0296249P.

XX PR 10-SEP-2001; 2001US-0318471P.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J;

XX WPI; 2003-140484/13.

XX Novel short interfering RNA and enzymatic nucleic acid useful for  
PT treating cancer, modulates the expression of a nucleic acid encoding  
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.

XX Claim 58; Page 89; 185pp; English.

XX The invention relates to a novel short interfering RNA (siRNA) nucleic  
CC acid molecule or an enzymatic nucleic acid molecule, that modulates  
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,  
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic  
CC acid molecule of the invention has cytosolic, anti-HIV, and anti-  
CC rheumatic activity. The nucleic acid molecules are useful for reducing  
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are  
CC also useful for treating breast, ovarian, colorectal, lung, prostate,  
CC bladder, or pancreatic cancer, and HIV infection, AIDS. The sequences  
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,  
CC ABZ66530 - ABZ66595 represent substrate/target sequences for the human  
CC ribozymes of the invention

XX SQ Sequence 17 BP; 2 A; 3 C; 0 G; 0 T; 12 U; 0 Other;  
 Query Match 0.8%; Score 15.4; DB 1; Length 17;  
 Best Local Similarity 94.1%; Pred. No. 1.3e+02;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1653 AAGAAAAATAAGAGAA 1669  
 |||||  
 Db 17 AAGAAAAATAAGAGTA 1

RESULT 137  
 AAZ98670  
 ID AAZ98670 standard; DNA; 18 BP.  
 XX  
 AC AAZ98670;  
 XX  
 DT 05-JUN-2000 (first entry)  
 XX PCR primer #2 for Escherichia coli genomic DNA amplification.  
 DE  
 XX Specific binding assay; analyte determination; antigen; hapten; drug;  
 KW cancer marker; pesticide; chemiluminescent compound; pollutant;  
 KW PCR primer; ss.  
 XX  
 OS Escherichia coli.  
 XX  
 PN EP984282-A2.  
 XX  
 PR 22-MAY-1991; 91US-00704569.  
 PR 20-JUN-1991; 91US-00718490.  
 PR 21-MAY-1992; 92EP-00304630.  
 XX  
 PA (DADE-) DADE BEHRING MARBURG GMBH.  
 XX  
 PI Ullman EF, Kirakossian H, Pease JS, Wagner DB, Daniloff Y;  
 XX WPI; 2000-225922/20.  
 DR  
 XX  
 CC Particles containing a chemiluminescent donor and a fluorescent acceptor  
 PT are useful in specific binding assays to determine antigens, haptens,  
 PT enzymes, hormones, cancer markers or nutritional markers.  
 XX  
 PS Example 7; Page 68; 79pp; English.  
 CC  
 CC This sequence represents a PCR primer used to amplify Escherichia coli  
 CC genomic DNA. The primer is used in an example of a method for determining  
 CC analyte in a sample using the particles of the invention. The invention  
 CC relates to particles (I) containing a compound (II) and a fluorescent  
 CC compound (III). Compound II reacts with singlet oxygen to form a  
 CC metastable intermediate that can decompose with simultaneous or  
 CC subsequent emission of light. The fluorescent compound (III) is excited  
 CC by activated compound (II) and emits at a wavelength longer than the  
 CC emission wavelength of compound (II). The particles are useful in  
 CC specific binding assays. The assays can be used to determine antigens or  
 CC haptens, e.g. blood group or HLA antigens or bacterial, fungal, protozoal  
 CC or viral antigens, other proteins e.g. immunoglobulins, cytokines,  
 CC enzymes, hormones, cancer markers or nutritional markers, microorganisms,  
 CC drugs, metabolites, pesticides, pollutants or polynucleotides. The longer  
 CC emission wavelength of (III) eliminates interference from serum  
 CC components when the particles are used in specific binding assays in the  
 CC presence of such components  
 XX  
 SQ Sequence 18 BP; 1 A; 3 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 15.4; DB 1; Length 18;  
 Best Local Similarity 94.1%; Pred. No. 1.4e+02;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 441 TTGACCGCGGCTGTG 457  
 |||||  
 Db 2 TTGAGCGCGGCTGTG 18

RESULT 138  
 AAZ98646  
 ID AAZ98646 standard; DNA; 18 BP.  
 XX  
 AC AAZ98646;  
 XX  
 DT 05-JUN-2000 (first entry)  
 XX PCR primer #2 used to amplify E. coli genomic DNA.  
 DE  
 XX Homogeneous specific binding assay; analyte determination; antigen;  
 KW hapten; drug; cancer marker; pesticide; pollutant; PCR primer;  
 KW photochemically activatable chemiluminescent compound; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN EP984281-A2.  
 XX  
 PD 08-MAR-2000.  
 XX  
 PF 21-MAY-1992; 99EP-00121547.  
 XX  
 PR 22-MAY-1991; 91US-00704569.  
 PR 20-JUN-1991; 91US-00718490.  
 PR 21-MAY-1992; 92EP-00304630.  
 XX  
 PA (DADE-) DADE BEHRING MARBURG GMBH.  
 XX  
 PI Ullman EF, Kirakossian H, Pease JS, Wagner DB, Daniloff Y;  
 XX WPI; 2000-197307/18.  
 DR  
 XX  
 CC Homogeneous specific binding assay, e.g. for proteins or nucleic acids,  
 PT uses photochemically activatable chemiluminescent compound.  
 XX  
 PS Example 7; Page 67; 78pp; English.  
 CC  
 CC This sequence represents a PCR primer used to amplify Escherichia coli  
 CC genomic DNA. The primer is used in an example of the assay of the  
 CC invention. The invention relates to a homogeneous assay for determining  
 CC an analyte, comprising combining medium suspected of containing an  
 CC analyte with a label reagent, and intrinsically metastable species, and  
 CC determining the reaction. The label reagent comprises a suspended  
 CC particle and a specific binding pair (sbp) member associated with a  
 CC photochemically activatable chemiluminescent compound (PACC), the sbp is  
 CC capable of binding to a second sbp or to the analyte, the second sbp  
 CC being capable of binding to the analyte. The metastable species is  
 CC capable of diffusing into the medium and reacts preferentially with the  
 CC PACC, when brought into close proximity by the presence or absence of the  
 CC analyte. The method can be used to determine antigens or haptens, e.g.  
 CC blood group or HLA antigens or bacterial, fungal, protozoal or viral  
 CC antigens, other proteins e.g. immunoglobulins, cytokines, enzymes,  
 CC hormones, cancer markers or nutritional markers, microorganisms, drugs,  
 CC metabolites, pesticides, pollutants or polynucleotides. The method is a  
 CC homogeneous assay and does not require a separation step  
 XX  
 SQ Sequence 18 BP; 1 A; 3 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 15.4; DB 1; Length 18;  
 Best Local Similarity 94.1%; Pred. No. 1.4e+02;  
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 441 TTGACCGCGGCTGTG 457  
 |||||  
 Db 2 TTGAGCGCGGCTGTG 18



XX  
DT  
XX  
DE  
XX  
XX  
16-DEC-2004 (first entry)  
Hepatitis C virus (HCV) oligonucleotide seqid 5847.  
antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
cytostatic; anticonvulsant; nootropic; muscular; anti-HIV;  
RNA interference; iRNA; antisense technology; lipid metabolism;  
cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
coronary artery disease; CAD; coronary heart disease; CHD;  
atherosclerosis; hepatic glucose production;  
glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
colon cancer; lung cancer; neurological disease; Huntington disease;  
spinocerebellar ataxia; viral disease; AIDS; hepatitis C virus; HCV; ss.  
Hepatitis C virus.  
OS  
XX  
PN  
XX  
PD  
XX  
XX  
23-SEP-2004.  
WO2004080406-A2.  
XX  
PF  
XX  
XX  
08-MAR-2004; 2004WO-US007070.  
XX  
PR  
XX  
PR  
12-MAR-2003; 2003US-0452682P.  
PR  
13-MAR-2003; 2003US-0454265P.  
PR  
13-MAR-2003; 2003US-0454962P.  
PR  
14-APR-2003; 2003US-0455050P.  
PR  
14-APR-2003; 2003US-0463894P.  
PR  
17-APR-2003; 2003US-0463772P.  
PR  
25-APR-2003; 2003US-0463665P.  
PR  
25-APR-2003; 2003US-0465802P.  
PR  
09-MAY-2003; 2003US-0469612P.  
PR  
08-AUG-2003; 2003US-0493986P.  
PR  
11-AUG-2003; 2003US-0494597P.  
PR  
26-SEP-2003; 2003US-0506341P.  
PR  
09-OCT-2003; 2003US-0510246P.  
PR  
10-OCT-2003; 2003US-0510318P.  
PR  
07-NOV-2003; 2003US-0518453P.  
XX  
PA  
(ALNY-) ALNYLAM PHARM.  
XX  
PI  
XX  
Manoharan M, Bumcrot D;  
XX  
DR  
WPI; 2004-677362/66.  
XX  
XX  
Interference RNA agent useful for treating dyslipidemias, coronary artery  
disease, diabetes, cancer or neurological disease, comprises sense  
sequence and antisense sequence which has specific modifications.  
XX  
XX  
Example 5; SEQ ID NO 5847; 378pp; English.  
XX  
PS  
XX  
CC  
The invention describes a RNA interference (iRNA) agent (I) comprising a  
sense sequence and an antisense sequence, where the sense sequences have  
one or more asymmetrical 2'-O alkyl modifications, the antisense  
sequences have one or more asymmetrical phosphorothioate modifications  
and the antisense sequence targets a human gene sequence. Also described  
are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
levels or glucose-6-phosphatase levels in a subject; producing (I);  
stabilising (I), involves selecting a sequence with activity and  
introducing one or more asymmetrical modification in the sequence, where  
the modification decreases nuclease sensitivity while not decreasing its  
activity; a kit comprising (I) and instructions for its use; and a device  
that can be dispense or administer a composition comprising (I). (I) is  
useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
The subject is suffering from a disorder characterised by elevated or  
otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
levels of cholesterol, and/or dysregulation of lipid metabolism. The  
disorder is chosen from the HDL/LDL cholesterol imbalance,  
dyslipidaemias, hypercholesterolaemia, statin-resistant  
hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
disease (CHD) and atherosclerosis. (I) is administered to a subject to  
inhibit hepatic glucose production or for treating glucose-metabolism-  
related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
treating the diseases as mentioned above, cancer (e.g. breast, colon or  
lung cancer), neurological disease (e.g., Huntington disease or  
spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
represents a hepatitis C virus (HCV) antisense oligonucleotide that can  
be used to control HCV gene expression.  
XX  
SQ  
Sequence 19 BP; 7 A; 3 C; 6 G; 3 T; 0 U; 0 Other;  
Query Match 0.8%; Score 15.4; DB 1; Length 19;  
Best Local Similarity 94.1%; Pred. No. 1.6e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
OY 1930 TGAATTGGAAGATGCG 1946  
|||||  
DB 1 TGAATGGAGATGCG 17  
RESULT 142  
AAX92728  
ID AAX92728 standard; DNA; 20 BP.  
XX  
AC AAX92728;  
XX  
DT 13-SEP-1999 (first entry)  
DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.  
XX  
KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;  
sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;  
neutralising epitope; PCR primer; ss.  
XX  
OS Synthetic.  
OS Chlamydothila pneumoniae.  
XX  
FN WO927105-A2.  
PN 03-JUN-1999.  
PD  
XX  
PF 20-NOV-1998; 98WO-IB001890.  
XX  
PR 21-NOV-1997; 97FR-00014673.  
PR 04-NOV-1998; 98US-0107078P.  
XX  
PA (GEST ) GENSET.  
XX  
PI Griffais R;  
XX  
DR WPI; 1999-357842/30.  
XX  
PT Genome sequence of Chlamydia pneumoniae.  
XX  
PS Page 1534; Disclosure; 1912pp; English.  
XX  
AAX91991-X97517 represent PCR primers used to amplify open reading frames  
and other nucleic acid sequences from the genome of Chlamydia pneumoniae  
(see AAX91990). C. pneumoniae causes respiratory disease such as  
pneumonia and bronchitis and is thought to be a contributing factor in  
heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema  
nodosum or pharyngitis. The polypeptides encoded by the open reading  
frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used  
in immunogenic compositions as vaccines. Vectors containing C. pneumoniae  
nucleotide sequences can also be used as immunogenic compositions,  
especially where the vector directs the expression of a neutralising  
epitope of C. pneumoniae  
XX  
SQ  
Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;  
Query Match 0.8%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 1.8e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
OY 1268 TACTCAGCCATAGAAAC 1284

```
Db 1 ||||| 17
RESULT 143
AAS97595/c
ID AAS97595 standard; DNA; 20 BP.
XX
AC AAS97595;
XX
XX 12-MAR-2002 (first entry)
XX
XX Murine SAC1 gene-specific oligonucleotide PCR primer #200.
XX
XX Human; mouse; SAC1; carbohydrate; sweetener; ethanol; alcoholism; ss;
XX obesity; diabetes; transgenic embryo; body tissue; body fluid; pancreas;
XX blood; tongue; PCR primer; anorectic; antidiabetic; gene therapy;
XX protein replacement therapy.
XX
XX Mus sp.
OS
XX
XX WO200183749-A2.
XX
XX 08-NOV-2001.
XX
XX 25-APR-2001; 2001WO-US013387.
XX
XX 28-APR-2000; 2000US-0200794P.
XX
XX 28-JUL-2000; 2000US-0221419P.
XX
XX 10-NOV-2000; 2000US-024743P.
XX
XX (WARN ) WARNER LAMBERT CO.
XX (MONE-) MONELL CHEM SENSES CENT.
XX
XX Bachmanov AA, Beauchamp GK, Chatterjee A, De Jong PJ, Li S, Li X;
XX Ohmen JD, Reed DR, Ross D, Tordoff WG;
XX WPI; 2002-075162/10.
XX
XX Novel isolated polypeptide comprising variant form of mouse or human SAC1
XX polypeptide, and is associated with altered preference for carbohydrates
XX or other sweeteners, useful for preventing obesity, diabetes, alcoholism.
XX
XX Claim 14; Page 81; 239pp; English.
XX
XX The invention relates to an isolated polypeptide, comprising a variant
XX form of mouse or human SAC1 polypeptide. The variant form is associated
XX with altered preference for carbohydrates, other sweeteners or ethanol.
XX The polypeptide and its associated DNA sequence can be produced by
XX recombinant techniques and is useful for preventing obesity, diabetes or
XX alcoholism associated with SAC1 expression. The sequences are useful in
XX screening for drugs and sweeteners. Recombinant cell lines and transgenic
XX embryos may be used in screening for and identifying agents that induce
XX or repress function of SAC1. Predisposition to diabetes, obesity or
XX alcoholism can be ascertained by testing any fluid or tissue of a human
XX (such as blood, pancreas or tongue) for sequence variations of the SAC1
XX gene. A sequence variation of the SAC1 locus may indicate a
XX predisposition to diabetes, obesity and/or alcoholism and may provide a
XX diagnostic mark. The polynucleotide can be detected in a biological
XX sample by contacting the DNA with a probe to form a hybridisation complex
XX which is then detected. The sequences represent cDNA encoding human and
XX mouse SAC1 polypeptides and PCR primers specific for the SAC1 genes
XX
XX Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 0.8%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 188 TTCTATGCTTCTGAGAT 204
|||||
Db 18 TTCTATGCTTCTGAGAT 2
```

```
RESULT 144
ADI36613/c
ID ADI36613 standard; DNA; 20 BP.
XX
AC ADI36613;
XX
XX 22-APR-2004 (first entry)
XX
XX Human PLML DNA, antisense oligonucleotide #22.
XX
XX Human; PLML; phospholemmann-like protein expressed in breast tumour;
XX antisense therapy; antimicrobial; antiinflammatory; cytostatic;
XX phosphorothioate; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= OTHER
XX /note= "This oligonucleotide has a phosphorothioate
XX backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
XX and 3' ends, which are 5 nucleotides in length at each
XX end. All cytidine residues are 5-methylcytidines"
XX
XX US2003225014-A1.
XX
XX 04-DEC-2003.
XX
XX 31-MAY-2002; 2002US-00160792.
XX
XX 31-MAY-2002; 2002US-00160792.
XX (ISIS-) ISIS PHARM INC.
XX
XX Watt AT;
XX
XX WPI; 2004-051924/05.
XX
XX New antisense oligonucleotides encoding phospholemmann-like protein
XX expressed in breast tumors (PLML), useful for diagnosing, preventing or
XX treating diseases associated with PLML, e.g. infection, inflammation or
XX tumors.
XX
XX Claim 1; SEQ ID NO 33; 55pp; English.
XX
XX The present invention relates to antisense compounds targeted to a
XX nucleic acid encoding human PLML phospholemmann-like protein expressed in
XX breast tumors). The antisense compound comprises an antisense
XX oligonucleotide that specifically hybridises with the nucleic acid and
XX inhibits the expression of PLML. The antisense oligonucleotide is a
XX chimeric oligonucleotide. The antisense oligonucleotide comprises at
XX least one modified internucleoside linkage, preferably a phosphorothioate
XX linkage. It also comprises at least one modified sugar moiety, preferably
XX a 2'-O-methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide
XX further comprises at least one modified nucleobase, preferably a 5-
XX methylcytosine. The antisense oligonucleotides are useful for the
XX treatment of infection, inflammation, and tumours. The present sequence
XX represents an antisense oligonucleotide used in the examples of the
XX present invention.
XX
XX Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;
Query Match 0.8%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 2 GCAGGCTTTGCTGCTCT 18
|||||
Db 20 GCAGGCTTTGCTGCTCT 4
```

```

RESULT 145
ADI36680
ID ADI36680 standard; DNA; 20 BP.
XX
AC ADI36680;
XX
DT 22-APR-2004 (first entry)
XX
DE Human PLML DNA target sequence #11.
XX
KW Human; PLML; phospholemman-like protein expressed in breast tumour;
KW antisense therapy; antimicrobial; antiinflammatory; cytostatic; ds.
XX
OS Homo sapiens.
XX
PN US2003225014-A1.
XX
PD 04-DEC-2003.
XX
PF 31-MAY-2002; 2002US-00160792.
XX
PR 31-MAY-2002; 2002US-00160792.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Watt AT;
XX
WPI; 2004-051924/05.
XX
New antisense oligonucleotides encoding phospholemman-like protein
PT expressed in breast tumors (PLML), useful for diagnosing, preventing or
PT treating diseases associated with PLML, e.g. infection, inflammation or
PT tumors.
XX
PS Example 15; SEQ ID NO 100; 55pp; English.
XX
The present invention relates to antisense compounds targeted to a
CC nucleic acid encoding human PLML phospholemman-like protein expressed in
CC breast tumors). The antisense compound comprises an antisense
CC oligonucleotide that specifically hybridises with the nucleic acid and
CC inhibits the expression of PLML. The antisense oligonucleotide is a
CC chimeric oligonucleotide. The antisense oligonucleotide comprises at
CC least one modified internucleoside linkage, preferably a phosphorothioate
CC linkage. It also comprises at least one modified sugar moiety, preferably
CC a 2'-O-methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide
CC further comprises at least one modified nucleobase, preferably a 5-
CC methylcytosine. The antisense oligonucleotides are useful for the
CC treatment of infection, inflammation, and tumours. The present sequence
CC represents a human PLML target DNA sequence for an antisense
CC oligonucleotide.
XX
SQ Sequence 20 BP; 2 A; 6 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 GCAGGCTTCTGCTCT 18
DB 1 GCAGGCTTCTGCTCT 17

RESULT 146
ADM15935/c
ID ADM15935 standard; DNA; 20 BP.
XX
AC ADM15935;
XX
DT 15-JUL-2004 (first entry)
XX
DE Murine SAC1 DNA PCR primer #200.
XX
KW Mouse; SAC1; PCR; ss; carbohydrate; sweetener; ethanol; obesity;

```

```

KW diabetes; alcoholism; antidiabetic; alcohol; anorectic; antialcoholic;
KW primer.
XX
OS Mus musculus.
XX
PN US2004081964-A1.
XX
PD 29-APR-2004.
XX
PF 25-OCT-2002; 2002US-00280183.
XX
PR 25-OCT-2002; 2002US-00280183.
XX
(BACH/) BACHMANOV A A.
(PA) (BEAU/) BEAUCHAMP G K.
(PA) (LISS/) LI S.
(PA) (LIXX/) LI X.
(PA) (REED/) REED D R.
(PA) (TORD/) TORDOFF M G.
(PA) (ROSS/) ROSS D A.
(PA) (OHMA/) OHMAN J D.
(PA) (CHAT/) CHATTERJEE A.
(PA) (DJON/) DE JONG P J.
XX
Bachmanov AA, Beauchamp GK, Li S, Li X, Reed DR, Tordoff MG;
PI Ross DA, Ohman JD, Chatterjee A, De Jong PJ;
XX
WPI; 2004-340133/31.
XX
New isolated polynucleotides for sensing carbohydrates, other sweeteners,
PT or ethanol, useful for screening drugs for inhibition or restoration of
PT gene function as antidiabetic, antiobesity or antialcohol consumption
PT therapies.
XX
PS Example 12; SEQ ID NO 205; 148pp; English.
XX
The invention relates to SAC1 polypeptides and the polynucleotides
CC encoding them. The polynucleotides contain a variation associated with
CC sensing carbohydrates, other sweeteners or ethanol. The invention also
CC relates to a method for analysing a biomolecule in a biological sample,
CC comprising altering SAC1 activity in the sample and measuring the
CC activity, a method for analysing a polynucleotide in a biological sample,
CC comprising contacting a polynucleotide in a biological sample with a
CC probe where the probe hybridises to a SAC1 polynucleotide to form a
CC hybridisation complex and detecting the hybridisation complex, a method
CC of identifying susceptibility to obesity or diabetes comprising comparing
CC the nucleotide sequence of the suspected SAC1 allele with a wild type
CC nucleotide sequence, where the difference between the suspected allele
CC and the wild-type sequence identifies a sequence variation of the SAC1
CC nucleotide sequence, and a method of treating or preventing obesity,
CC diabetes or alcoholism associated with expression of SAC1, comprising
CC administering to a subject a pharmaceutical composition and a transgenic
CC animal that carries an altered SAC1 allele. The methods and compositions
CC of the invention are useful for screening drugs for inhibition or
CC restoration of gene function as antidiabetic, antiobesity or antialcohol
CC consumption therapies and for identifying sweeteners and alcohols. This
CC sequence represents a PCR primer used to amplify murine SAC1 DNA of the
CC invention.
XX
SQ Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 188 TTCTATGCTTCTGAGAT 204
DB 18 TTCTATGCTTCTGAGAT 2

RESULT 147
AAQ74655
ID AAQ74655 standard; DNA; 20 BP.

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```

XX AC AAQ74655;
XX
XX
XX DT 25-MAR-2003 (revised)
XX DT 07-JUN-1995 (first entry)
XX DE Aspergillus aculeatus xylanase partial DNA.
XX
XX KW Xylanase; Aspergillus aculeatus; brewing; paper pulp; food preparation;
XX KW plant cell wall degradation; ss.
XX OS Aspergillus aculeatus.
XX
XX PN W09421785-A1.
XX
XX PD 29-SEP-1994.
XX
XX PF 02-MAR-1994; 94WO-DK000088.
XX
XX PR 10-MAR-1993; 93DK-0000268.
XX PR 14-OCT-1993; 93DK-00001151.
XX
XX PA (NOVO ) NOVO-NORDISK AS.
XX
XX PI Kofod LV, Kauppinen MS, Christgau S, Heldt-Hansen HP, Dalboge H;
XX PI Andersen LN, Si JQ, Jacobsen TS, Munk N, Mullertz A;
XX
XX DR WPI; 1994-317006/39.
XX
XX PT New xylanase enzymes from Aspergillus aculeatus - used for degrading
XX PT plant cell wall components, e.g. in the prepn. of feed, in baking and in
XX PT prepn. of pulp or paper.
XX
XX PS Claim 2; Page 58; 80pp; English.
XX
XX CC AAQ74642-Q74676 are partial Aspergillus aculeatus xylanase DNA sequences,
XX CC one or more of which can form part of a DNA sequence that encodes an
XX CC enzyme with xylanase activity. The xylanase enzyme degrades plant cell
XX CC wall components and reduces the viscosity of plant cell wall derived
XX CC material. These properties are useful in the production of dough and
XX CC baked products; in the preparation of feed, food, beer, wine, pulp and
XX CC paper; and for the separation of cereal components. It can also be used
XX CC in the production of antibodies. (Updated on 25-MAR-2003 to correct PN
XX CC field.) (Updated on 25-MAR-2003 to correct PI field.)
XX
XX SQ Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 637 CTGTGTTGACTCACAATTGTC 656
Db 1 CTGTGTTGCCAACAATTGTC 20

RESULT 148
AAQ75601/c
ID AAQ75601 standard; DNA; 20 BP.
XX
XX AC AAQ75601;
XX
XX DT 25-MAR-2003 (revised)
XX DT 22-OCT-1996 (first entry)
XX
XX DE B-actin (60-79) RT-PCR oligonucleotide.
XX
XX KW Intracellular IL-1 receptor antagonist; icIL-lra;
XX KW secreted IL-1 receptor antagonist; sIL-lra; interleukin; IL-1a; IL-1b;
XX KW auto-immune disease; ss.
XX
XX OS Synthetic.
XX
XX PN W09612022-A1.
XX
XX PD 25-APR-1996.
XX
XX PF 12-OCT-1995; 95WO-EP004023.
XX
XX PR 13-OCT-1994; 94IT-MI002097.
XX
XX PA (ISTF ) ARS APPLIED RES SYST HOLDING NV.
XX
XX PI Colotta F, Muzio M, Mantovani A;
XX
XX DR WPI; 1996-222008/22.
XX
XX PT IL-1 receptor antagonist active against IL-1a and -1b - for treating,
XX PT preventing or diagnosing auto-immune diseases.
XX
XX PS Example 1; Page 15; 36pp; English.
XX
XX CC An new IL-1 receptor antagonist includes the sequence given in AAR91360.
XX CC The complete icIL-lrai is given in AAT15099. The protein is expressed by

```

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PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX DR WPI; 1995-018287/03.
XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 5; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 20 BP; 0 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1653 AAGAAAAATTAAGAGAAAAA 1672
Db 20 AAGAAAAAATAAGAGAAAAA 1

RESULT 149
AAT15101
ID AAT15101 standard; cDNA; 20 BP.
XX
XX AC AAT15101;
XX
XX DT 25-MAR-2003 (revised)
XX DT 22-OCT-1996 (first entry)
XX
XX DE B-actin (60-79) RT-PCR oligonucleotide.
XX
XX KW Intracellular IL-1 receptor antagonist; icIL-lra;
XX KW secreted IL-1 receptor antagonist; sIL-lra; interleukin; IL-1a; IL-1b;
XX KW auto-immune disease; ss.
XX
XX OS Synthetic.
XX
XX PN W09612022-A1.
XX
XX PD 25-APR-1996.
XX
XX PF 12-OCT-1995; 95WO-EP004023.
XX
XX PR 13-OCT-1994; 94IT-MI002097.
XX
XX PA (ISTF ) ARS APPLIED RES SYST HOLDING NV.
XX
XX PI Colotta F, Muzio M, Mantovani A;
XX
XX DR WPI; 1996-222008/22.
XX
XX PT IL-1 receptor antagonist active against IL-1a and -1b - for treating,
XX PT preventing or diagnosing auto-immune diseases.
XX
XX PS Example 1; Page 15; 36pp; English.
XX
XX CC An new IL-1 receptor antagonist includes the sequence given in AAR91360.
XX CC The complete icIL-lrai is given in AAT15099. The protein is expressed by

```

CC DNA similar to that encoding the known receptor inhibitor icIL-lra, but  
CC having a 63 bp insert between the first icIL-lra specific exon and the  
CC internal acceptor site of the first exon of sIL-lra. Oligonucleotides  
CC IRA4 and IRA5 (AAT15100) were used in icIL-lra1 amplification. They  
CC specifically recognise the extra exon. Human B-actin primers (AAT15101-  
CC T15102) were used as a control in amplification. (Updated on 25-MAR-2003  
CC to correct PR field.)  
XX  
SQ Sequence 20 BP; 3 A; 7 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 504 GCGCTCGTCAGCGCCCAACGG 523  
DB 1 GCGCTCGTCGTCGACAACGG 20

RESULT 150  
AAT09002/c  
ID AAT09002 standard; DNA; 20 BP.  
XX  
AC AAT09002;  
XX  
DT 25-MAR-2003 (revised)  
DT 24-JUL-1997 (revised)  
DT 02-AUG-1996 (first entry)  
XX  
DE 3' primer for gdh gene amplification.

XX L-glutamic acid; L-lysine; production; Coryneform bacteria;  
KW alpha-ketoglutaric acid dehydrogenase; efficient; primer;  
KW polymerase chain reaction; probe; gdh; gta; icd; Coryneform glutamicum;  
KW ss.  
XX

OS Synthetic.

XX WO9534672-A1.

XX 21-DEC-1995.

XX 07-JUN-1995; 95WO-JP001131.

PR 14-JUN-1994; 94JP-00131744.

XX (AJIN ) AJINOMOTO CO INC.

XX Asakura Y, Usuda Y, Tsujimoto N, Kimura E, Abe C, Kawahara Y;

PI Nakamatsu T, Kurahashi O;

XX WPI; 1996-049699/05.

XX Coryneform L-glutamic acid producing bacteria - useful in producing L-  
PT glutamic acid and L-lysine.

PS Example 4; Page 51; 62pp; Japanese.

XX AAT09001-02 were used to PCR amplify Coryneform glutamicum gdh gene. This  
CC was ligated with a SmaI fragment contg. Brevibacterium lactofermentum  
CC alpha-ketoglutaric acid dehydrogenase (KGDH) gene, to form pHSG-gdh. The  
CC alpha-KGDH gene is derived from L-glutamic acid producing Coryneform  
CC bacteria. L-glutamic producing Coryneform bacteria are useful in  
CC producing L-glutamic acid. Coryneform bacteria contg. the DNA and L-  
CC lysine producing ability lead to the production of L-lysine. (Revised  
CC entry submitted to correct sequence analysis breakdown.) (Updated on 25-  
CC MAR-2003 to correct PN field.)

XX Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1594 GCCAGATGCTGGGTAAATC 1613  
DB 20 GCCAGATGCTGGGAAGATC 1

RESULT 151  
AAT44544/c  
ID AAT44544 standard; DNA; 20 BP.

XX  
AC AAT44544;

DT 05-FEB-1997 (first entry)

XX Primer for agammaglobulinaemia tyrosine kinase gene fragment 4.

XX agammaglobulinaemia; tyrosine kinase; sex-linked; analysis; gene therapy;  
KW diagnosis; carrier; primer; PCR; ss.

OS Synthetic.

XX JP08205898-A.

XX 13-AUG-1996.

XX 01-FEB-1995; 95JP-00034715.

XX 01-FEB-1995; 95JP-00034715.

XX (MITP ) MITSUBISHI YUKA BCL KK.

XX WPI; 1996-419829/42.

XX DNA fragment contg. a gene involved in sex-linked a:gamma.globulinemia -  
PT useful for diagnosing an XLA carrier and for gene therapy.

XX Claim 3; Page 4; 15pp; Japanese.

XX The agammaglobulinaemia tyrosine kinase (ATK) gene is involved in sex-  
CC linked agammaglobulinaemia (XLA). DNA fragments of the ATK gene (AAT44527  
CC -37) are useful for analysis and diagnosis of XLA carriers and for gene  
CC therapy. AAT44544-45 were used to amplify DNA fragment 4 (AAT44530)

XX Sequence 20 BP; 4 A; 5 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1087 CTACACGCCAGTGATGATAT 1106  
DB 20 CAAGAAGCCAGTGATGATAT 1

RESULT 152  
AAT17996/c  
ID AAT17996 standard; DNA; 20 BP.

XX  
AC AAT17996;

DT 04-OCT-1996 (first entry)

XX Brevibacterium lactofermentum gdh gene 3'-PCR primer.

XX gdh gene; production; L-lysine; L-Glutamic acid; fermentation;  
KW mutant strain; Coryneform bacteria; temperature sensitive; mutation;  
KW biotin antagonist; polymerase chain reaction;  
KW PCR polyoxyethylene sorbitan monopalmitate; primer; ss.

OS Synthetic.

XX WO9606180-A1.

XX



```

PD 29-FEB-1996.
XX
PF 09-AUG-1995; 95WO-JP001586.
XX
PR 19-AUG-1994; 94JP-00195465.
XX
PA (AJIN ) AJINOMOTO CO INC.
XX
PI Kimura E, Asakura Y, Uehara A, Inoue S, Kawahara Y, Yoshihara Y;
PI Nakamatsu T;
XX
DR WPI; 1996-151383/15.
XX
XX Preparation of L-Lysine and L-Glutamic acid - by fermentation of
PT temperature sensitive Coryneform bacterium.
XX
XX Example 4; Page 58; 71pp; Japanese.
XX
CC The primer pair AAT1795/96 was used for the PCR amplification of the
CC Brevibacterium lactofermentum gdh gene, which can be used in a claimed
CC method for the prodn. of L-Lys and L-Glu by fermentation. The method
CC comprises culturing a mutant strain, derived from a Coryneform L-Glu
CC producing bacterium with a temp. sensitive mutation with respect to
CC biotin antagonists, which is able to produce L-Lys and L-Glu in the
CC absence of biotin, antagonists in a medium contg. excess biotin, and
CC collecting the accumulated L-Lys and L-Glu. The biotin utilisation
CC antagonist is pref. polyoxyethylene sorbitan monopalmitate
XX
SQ Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1594 GCCAGATGCTGGGTAGATC 1613
DB 20 GCCAGATGCTGGGAAGATC 1

RESULT 153
AAT47265/c
ID AAT47265 standard; RNA; 20 BP.
XX
AC AAT47265;
XX
DT 27-AUG-1997 (first entry)
XX
DE 5' fragment #2 of alfalfa mosaic virus.
XX
KW Capped RNA molecule; mRNA maturation; translation initiation; influenza;
KW endonuclease aptamer; RNase; therapy; inhibitor; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /*mod_base= 7-methylguanosine
FT modified_base 2 /*tag= b
FT /*mod_base= triphosphorylated
FT modified_base 3 /*tag= c
FT /*mod_base= 2'-O-methyluridine
XX
PN W09640159-A1.
XX
PD 19-DEC-1996.
XX
PP 03-JUN-1996; 96WO-US008394.
XX
PR 07-JUN-1995; 95US-00480068.
XX

(MERI ) MERCK & CO INC.
Benseler F, Cole JL, Kuo LC, Olsen DB;
WPI; 1997-051868/05.
Production of capped RNA or analogues - useful as substrates for
influenza virus associated virally encoded endonuclease.
Claim 18; Page 12; 39pp; English.
AAT47264-T47280 represent capped RNA molecules produced by the method of
the invention. The method of the invention is for producing capped RNA or
RNA analogues. The method comprises reacting a RNA or analogue
oligonucleotide with a phosphate addition agent to form a RNA or analogue
mono-, di- or triphosphate, which is then capped. The presence of the cap
is important for mRNA maturation, initiation of translation, and protects
the mRNA against various RNases present in the cell. The capped RNA or
analogue is an influenza endonuclease aptamer, useful for treating or
preventing an influenza infection in an animal. The synthetic capped RNA
are substrates for virally encoded endonuclease associated with influenza
virus. The short non-extendible (due to their length or because of the
modification of the 3' end of the oligo) RNA molecules are potent
inhibitors of the cleavage of capped RNA by influenza endonuclease. They
may be used to investigate viral and cellular mechanisms of
transcription/translation, or mRNA maturation
XX
SQ Sequence 20 BP; 3 A; 1 C; 2 G; 0 T; 14 U; 0 Other;

Query Match 0.7%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1655 GAAAAATAAGAGAAAAACC 1674
DB 20 GAAATTTAAATATAAAACC 1

RESULT 154
AAV07500
ID AAV07500 standard; DNA; 20 BP.
XX
AC AAV07500;
XX
DT 22-SEP-1998 (first entry)
XX
DE Lelystad virus primer 39U70R.
XX
KW PRRSV; porcine reproductive respiratory syndrome virus; Lelystad virus;
KW infectious clone; vaccine; diagnostic assay; PCR; primer; anchorprimer;
KW ss.
XX
OS Synthetic.
OS Lelystad virus.
XX
PN EP839912-A1.
XX
PD 06-MAY-1998.
XX
PF 30-OCT-1996; 96EP-00203024.
XX
PR 30-OCT-1996; 96EP-00203024.
XX
PA (DIER-) INST DIERHOUDRIJ EN DIERGEZONDHEID ID-D.
PI Meulenbergh JMM, Ruijter JNA, Pol JMA;
XX
WPI; 1998-242677/22.
Generation of infectious clones of RNA viruses - comprising producing
recombinant nucleic acid containing at least one full length DNA copy or
in vitro transcribed RNA copy.
XX

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```
PS Disclosure; Col 8; 17pp; English.
XX
CC The invention relates to infectious clones of RNA viruses and vaccines
CC and diagnostic assays derived thereof. The following are claimed: (1)
CC generating an infectious clone based on the genome of a positive-strand
CC RNA virus, comprising producing a recombinant nucleic acid comprising at
CC least one full-length DNA copy or in vitro-transcribed RNA copy or a
CC derivative of either where the RNA virus has a genome of at least about
CC 15 kb; (2) generating an infectious clone based on the genome of an RNA
CC virus, comprising producing a recombinant nucleic acid comprising at
CC least one full-length DNA copy or in vitro-transcribed RNA copy or a
CC derivative of either and further comprising selecting infectious clones
CC by transfecting a host cell with the recombinant nucleic acid where the
CC host cell is not susceptible to infection with the virus; (3) a
CC recombinant nucleic acid comprising an infectious clone obtainable by (1)
CC or (2); (4) a recombinant nucleic acid molecule according to (3) in which
CC a nucleic acid sequence encoding a virulence marker and/or a serological
CC marker has been modified; (5) a recombinant nucleic acid molecule
CC according to (3) in which one open reading frame is substituted by an
CC ORF7 of the Arteriviridae; (6) a recombinant nucleic acid molecule of (3)
CC - (5) in which at least one additional heterologous nucleic acid sequence
CC is inserted; (7) a recombinant nucleic acid molecule of (3) - (6) in which
CC an open reading frame has been modified; (8) a modified RNA virus
CC comprising a recombinant nucleic acid of (3) - (7); (9) a cell infected
CC with a modified RNA virus of (8); (10) a protein and/or antigen obtained
CC from a cell culture of (9). The modified RNA-virus of (8) is used as a
CC vaccine and the protein or antigen of (10) may be used in diagnostic
CC assays. The present sequence represents Lelystad virus primer 39U70R,
CC which is a sense primer corresponding to nucleotides 14566-14585 of the
CC Lelystad virus genome
XX
SQ Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 0.7%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1505 GGAGTGGTAAACTCTGTAA 1524
DB 1 GGAGTGGTAACTCGTCAA 20
RESULT 155
AAZ40165
ID AAZ40165 standard; DNA; 20 BP.
XX
AC AAZ40165;
XX
DT 18-FEB-2000 (first entry)
DE PCR primer for human semaphorin, DCSema, coding sequence.
XX
KW Semaphorin; DCSema; human; inflammatory disease; VESPR; interleukin-12;
KW IL-12; immune response; aggressive micrometastasing tumour; therapy;
KW immune suppression; autoimmune disorder; semaphorin receptor;
KW immune regulation; viral infection; PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO958676-A2.
XX
PD 18-NOV-1999.
XX
PF 05-MAY-1999; 99WO-US009831.
XX
PR 14-MAY-1998; 98US-0085497P.
XX
PA (IMV) IMMUNEX CORP.
XX
PI Spriggs MK;
XX
DR WPI; 2000-053100/04.
XX
PT Novel neurologic regulator polypeptide for treating inflammatory
XX diseases, autoimmune disorders, etc...
XX
PS Example 1; Page 19; 41pp; English.
XX
CC This sequence represents a PCR primer for DNA encoding the human
CC semaphorin protein, designated DCSema, of the invention. DCSema is used
CC for treating inflammatory diseases. DCSema ligands bind with VESPR to
CC enhance or promote interleukin-12 (IL-12) production which induces an
CC immune response against aggressive micrometastasing tumours. They are
CC associated with immune suppression of mature dendritic cells and
CC therefore can be used for treating autoimmune disorders. They can be
CC employed to measure biological activity of any semaphorin receptor in
CC terms of its binding affinity for semaphorin ligand and also for
CC detecting semaphorin receptor by in vitro assays. DCSema polypeptides are
CC used as reagents in quality assurance studies to monitor shelf life and
CC stability of semaphorin receptor under different conditions). They are
CC also used as a research tool for studying the role of this ligand and its
CC receptor in immune regulation and are also used as carriers for
CC delivering diagnostic or therapeutic agents to cells expressing
CC semaphorin receptor. They are shown to play a role as immune regulators
CC in viral infection
XX
SQ Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 0.7%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1004 AGCGGAACAATGGAGTCGTC 1023
DB 1 AGTGGGAACAATGGCGTCTTC 20
RESULT 156
AAH19558
ID AAH19558 standard; DNA; 20 BP.
XX
AC AAH19558;
XX
DT 23-JUL-2001 (first entry)
DE Human beta-actin PCR primer #1.
XX
KW Human; transcription activation; immunoglobulin E; IgE; IgE receptor;
KW Fc-epsilonRI; USF-1; USF-2; allergy; beta-actin; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN JP2001057889-A.
XX
PD 06-MAR-2001.
XX
PF 23-AUG-1999; 99JP-00234854.
XX
PR 23-AUG-1999; 99JP-00234854.
XX
PA (ASAK) ASAKI BREWERIES LTD.
PA (TSUR/) TSURA T.
XX
DR WPI; 2001-310666/33.
XX
PT DNA having a transcription activating region of a gene, used for
XX developing an agent for preventing and treating allergic diseases.
XX
PS Example 6; Page 7; 12pp; Japanese.
XX
CC The present sequence is provided in a specification relating to a DNA
CC sequence which activates transcription of human high affinity
CC immunoglobulin (Ig)E receptor (Fc-epsilonRI) alpha-chain gene. It may be
CC used for inhibiting the activation of transcription relating to USF-1 or
CC USF-2. The DNA contains the sequence tggggagcagctg99gtagaac, or cagctg.
```

CC The invention is useful for the development of an agent for preventing  
 XX and treating allergic diseases  
 SQ Sequence 20 BP; 3 A; 7 C; 7 G; 3 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 504 GCGCTGCTCAGCGCCACGG 523  
 ||||| |||||  
 Db 1 GCGCTGCTGCTCAGCGCCACGG 20

RESULT 157  
 AAF62997  
 ID AAF62997 standard; DNA; 20 BP.  
 XX  
 AC AAF62997;  
 XX  
 DT 08-MAY-2001 (first entry)  
 XX  
 DE Mouse PEPCCK-cytosolic antisense oligonucleotide ISIS 113325.  
 XX  
 DE Mouse; antiinflammatory; cytostatic; antisense gene therapy;  
 KW phosphoenol pyruvate carboxykinase-cytosolic; PEPCCK-cytosolic; infection;  
 KW inflammation; tumour formation; phosphorothioate; ss.  
 KW  
 XX  
 OS Mus musculus.  
 XX  
 PN US6187545-B1.  
 XX  
 PD 13-FEB-2001.  
 XX  
 PF 21-JAN-2000; 2000US-00488671.  
 XX  
 PR 21-JAN-2000; 2000US-00488671.  
 XX  
 PA (ISIS-) ISIS PHARM INC.  
 XX  
 PI McKay R, Butler WM, Wyatt J, Cowseert LM;  
 XX WPI; 2001-190979/19.  
 DR  
 XX  
 XX Antisense compound capable of modulating the expression of phosphoenol  
 PT pyruvate carboxykinase-cytosolic, useful for preventing or delaying  
 PT infection, inflammation or tumor formation.  
 XX  
 PS Example 17; Col 44; 64pp; English.  
 XX  
 CC The present sequence is one of a number of antisense compounds of up to  
 CC 30 nucleobases in length that are capable of inhibiting the expression of  
 CC phosphoenol pyruvate carboxykinase-cytosolic (PEPCCK-cytosolic). The  
 CC antisense compounds are useful for inhibiting the expression of PEPCCK-  
 CC cytosolic in cells or tissues. They are commonly used as research  
 CC reagents and in diagnostics, e.g. to elucidate the function of particular  
 CC genes. They are also useful for distinguishing between functions of  
 CC various members of a biological pathway and for research use. The  
 CC antisense compounds are also useful prophylactically, e.g. to prevent or  
 CC delay infection, inflammation or tumour formation. The present sequence  
 CC is a chimeric phosphorothioate oligonucleotide with 2'-MOE wings and a  
 CC deoxy gap  
 XX  
 SQ Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 25 CATCAGTTGCTTAGGCATC 44  
 ||||| |||||  
 Db 1 CTTAAGTTGCTTAGGCATC 20

RESULT 158  
 ABK24602/c  
 ID ABK24602 standard; DNA; 20 BP.  
 XX  
 AC ABK24602;  
 XX  
 DT 09-APR-2002 (first entry)  
 XX  
 DE EIF2AK3 gene sequencing primer #18.  
 XX  
 DE Human; EIF2AK3; antidiabetic; osteopathic; antiarthritic; hepatotropic;  
 KW nephrotropic; nootropic; diabetes; diabetes; Wolcott-Rallison syndrome; WRS;  
 KW osteoporosis; arthritis; hepatic dysfunction; nephropathy;  
 KW renal dysfunction; mental retardation; primer; ss;  
 KW eukaryotic initiation factor 2 alpha kinase 3.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200190371-A1.  
 XX  
 PD 29-NOV-2001.  
 XX  
 PF 23-MAY-2001; 2001WO-1B001153.  
 XX  
 PR 23-MAY-2000; 2000EP-00401436.  
 PR 02-OCT-2000; 2000EP-00402707.  
 XX  
 PA (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.  
 PA (NAGE-) CENT NAT GENOTYPAGE.  
 XX  
 PI Julier C, Delepine M, Nicolino M;  
 XX WPI; 2002-122021/16.  
 DR  
 XX  
 XX New mutated eukaryotic initiation factor 2 alpha kinase 3 genes and  
 PT polypeptides in patients with Wolcott-Rallison syndrome, useful for  
 PT preventing or treating e.g. diabetes, osteoporosis, arthritis or mental  
 PT retardation.  
 XX  
 PS Example 4; Page 31; 93pp; English.  
 XX  
 CC The invention relates to an isolated variant of a mammal genomic sequence  
 CC of the gene coding for the translation initiation factor 2 alpha kinase 3  
 CC (EIF2AK3). The EIF2AK3 nucleic acid variant is useful for the production  
 CC of a recombinant or synthetic polypeptide, and for screening compounds  
 CC capable of modulating EIF2AK3. The nucleic acid is also useful for  
 CC screening or diagnosing the diseases cited below. The nucleic acid of may  
 CC be used as sense or anti-sense oligonucleotide. The nucleic acid may also  
 CC be used as a primer or a probe, for detecting and/or amplifying a nucleic  
 CC acid sequence. The compound is useful as a medicament, particularly for  
 CC preventing and/or treating diabetes and/or pathology related to WRS, e.g.  
 CC type 1 diabetes, type 2 diabetes, the others forms of diabetes,  
 CC osteoporosis, arthritis, hepatic dysfunction, nephropathies or other  
 CC renal dysfunction, or mental retardation. The cell the mammal or the  
 CC polypeptide is useful for studying the expression or the activity of the  
 CC EIF2AK3 protein, and the direct or indirect interactions between the  
 CC EIF2AK3 protein and chemical or biochemical compounds, which may be  
 CC involved in the activity of the EIF2AK3 protein. The cell or polypeptide  
 CC is also useful for screening chemical or biochemical compounds capable of  
 CC interacting directly or indirectly with the EIF2AK3 protein, and/or  
 CC capable of modulating the expression or the activity of the EIF2AK3  
 CC protein. ABK24521-ABK24624 represent human EIF2AK3 coding sequences and  
 CC PCR primers of the invention  
 XX  
 SQ Sequence 20 BP; 5 A; 2 C; 8 G; 5 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1053 CTCACAAAAGGTGCTCTTG 1072  
 ||||| ||||| |||||

Db	20	CTCCACCAAGCTACTCTTG 1	Db	20	CTTTAAGCAACGCGATGGA 1
RESULT 159			RESULT 160		
ABI95304/C			ABI97348		
ID	ABI95304 standard; DNA; 20 BP.		ID	ABI97348 standard; DNA; 20 BP.	
XX	AC	ABI95304;	XX	AC	ABI97348;
XX	DT	16-FEB-2002 (first entry)	XX	DT	16-FEB-2002 (first entry)
XX	DE	Capture oligonucleotide Zip ID#2391 oligo #9.	XX	DE	Capture oligonucleotide Zip ID#4435 oligo #9.
XX	KW	Human; K-ras; PCR primer; probe; capture probe; mutation detection;	XX	KW	Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW	ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;		KW	ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;	
KW	infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;		KW	infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;	
KW	oncogene; tumour suppressor; human papillomavirus; forensic;		KW	oncogene; tumour suppressor; human papillomavirus; forensic;	
KW	environmental monitoring; food industry; feed industry; ss.		KW	environmental monitoring; food industry; feed industry; ss.	
XX	OS	Synthetic.	XX	OS	Synthetic.
XX	PN	WO200179548-A2.	XX	PN	WO200179548-A2.
XX	PD	25-OCT-2001.	XX	PD	25-OCT-2001.
XX	PF	04-APR-2001; 2001WO-US010958.	XX	PF	04-APR-2001; 2001WO-US010958.
XX	PR	14-APR-2000; 2000US-0197271P.	XX	PR	14-APR-2000; 2000US-0197271P.
XX	PA	(CORR ) CORNELL RES FOUND INC.	XX	PA	(CORR ) CORNELL RES FOUND INC.
PI	Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;		PI	Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;	
XX	WPI; 2002-034366/04.		XX	WPI; 2002-034366/04.	
XX	Designing capture oligonucleotide probes for use on a support to which		XX	Designing capture oligonucleotide probes for use on a support to which	
PT	complementary oligonucleotides hybridize with little mismatch.		PT	complementary oligonucleotides hybridize with little mismatch.	
XX	Example 5; Fig 29; 300pp; English.		XX	Example 5; Fig 29; 300pp; English.	
XX	The present invention describes a method (M1) for designing capture		XX	The present invention describes a method (M1) for designing capture	
CC	oligonucleotide probes (I) for use on a support to which complementary		CC	oligonucleotide probes (I) for use on a support to which complementary	
CC	oligonucleotide probes (II) will hybridize with little mismatch, where		CC	oligonucleotide probes (II) will hybridize with little mismatch, where	
CC	(I) have melting temperatures within a narrow range. The method is useful		CC	(I) have melting temperatures within a narrow range. The method is useful	
CC	for detecting infectious diseases caused by bacterial infectious agents		CC	for detecting infectious diseases caused by bacterial infectious agents	
CC	e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal		CC	e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal	
CC	infectious agents e.g. Cryptococcus neoformans, Candida albicans and		CC	infectious agents e.g. Cryptococcus neoformans, Candida albicans and	
CC	Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,		CC	Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,	
CC	Epstein-Barr virus and polio virus, and parasitic infectious agents		CC	Epstein-Barr virus and polio virus, and parasitic infectious agents	
CC	selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus		CC	selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus	
CC	medicines. The method is also useful for detecting genetic diseases such		CC	medicines. The method is also useful for detecting genetic diseases such	
CC	as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.		CC	as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.	
CC	Detecting cancer involving oncogenes, tumour suppressor genes, or genes		CC	Detecting cancer involving oncogenes, tumour suppressor genes, or genes	
CC	involved in DNA amplification, replication, recombination or repair, the		CC	involved in DNA amplification, replication, recombination or repair, the	
CC	cancer is specifically associated with a gene selected from BRCA1 gene,		CC	cancer is specifically associated with a gene selected from BRCA1 gene,	
CC	p53 gene, human papillomavirus types 16 and 18 and liver cancers. The		CC	p53 gene, human papillomavirus types 16 and 18 and liver cancers. The	
CC	method is also used for environmental monitoring, forensics and the food		CC	method is also used for environmental monitoring, forensics and the food	
CC	and feed industry, detecting comprises scanning (using e.g. a scanning		CC	and feed industry, detecting comprises scanning (using e.g. a scanning	
CC	electron microscope and infrared microscope) the support at the		CC	electron microscope and infrared microscope) the support at the	
CC	particular sites and identifying if ligation of the oligonucleotide probe		CC	particular sites and identifying if ligation of the oligonucleotide probe	
CC	sets occurred and correlating (using a computer) identified ligation to a		CC	sets occurred and correlating (using a computer) identified ligation to a	
CC	presence or absence of the target nucleotide sequences. ABI82074 to		CC	presence or absence of the target nucleotide sequences. ABI82074 to	
CC	ABI97546 represent oligonucleotide sequences used in the exemplification		CC	ABI97546 represent oligonucleotide sequences used in the exemplification	
CC	of the present invention		CC	of the present invention	
XX	Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;		XX	Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;	
SQ			SQ		
Query Match	0.7%; Score 15.2; DB 1; Length 20;		Query Match	0.7%; Score 15.2; DB 1; Length 20;	
Best Local Similarity	85.0%; Pred. No. 1.9e+02;		Best Local Similarity	85.0%; Pred. No. 1.9e+02;	
Matches	17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;		Matches	17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;	
QY	1772 CTTTATCAAGCGCTGCGA 1791		QY	1576 AGCCAGTCATCAGCTGTGC 1595	

```
Db      1 AGCGGTAAATCACCCTGTGC 20
RESULT 161
ABQ81004/c
ID      ABQ81004 standard; DNA; 20 BP.
XX
AC      ABQ81004;
XX
DT      10-JAN-2003 (first entry)
XX
DE      Fibroblast Growth Factor 1, FGF1, binding oligonucleotide #1.
XX
KW      Triple helix; FGF1; Fibroblast Growth Factor 1; ss.
XX
OS      Synthetic.
XX
PN      WO200277274-A2.
XX
PD      03-OCT-2002.
XX
PF      25-MAR-2002; 2002WO-FR001034.
XX
PR      23-MAR-2001; 2001FR-00003953.
PR      23-APR-2001; 2001US-0285272P.
XX
PA      (AVET ) AVENTIS PHARMA SA.
XX
PI      Blanche F, Cameron B;
XX
XX      WPI; 2003-018943/01.
XX
PT      Purifying double-stranded DNA, useful e.g. for isolating plasmids or
PT      therapeutic genes, by triple helix formation with oligonucleotide
PT      directed to a specific target sequence.
XX
PS      Claim 10; Page 20; 49pp; French.
XX
XX      The present invention relates to novel double stranded (ds) DNA sequences
CC      which can interact with a third strand to form a stable triple helix. The
CC      invention also relates to a method for purifying a ds DNA molecule,
CC      comprising contact with a third DNA strand that interacts with a target
CC      sequence (TS) in the ds DNA to form a triple helix. To illustrate the
CC      invention, an oligonucleotide from human FGF1 gene (ABQ81003) was used as
CC      the ds DNA sequence. The present sequence is one such third strand that
CC      can bind to ABQ81003 to form a triple helix. FGF1 is Fibroblast Growth
CC      Factor 1
XX
SQ      Sequence 20 BP; 0 A; 6 C; 0 G; 14 T; 0 U; 0 Other;

Query Match      0.7%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      1653 AAGAAAATAGAGAGAAAA 1672
      ||||| |||||
Db      20 AAGAAGAAGAAGAAGAA 1
      ||||| |||||

RESULT 162
ABZ92279
ID      ABZ92279 standard; DNA; 20 BP.
XX
AC      ABZ92279;
XX
DT      17-OCT-2003 (first entry)
XX
DE      Human oligonucleotide sequence.
XX
KW      Human; antisense; lung dysfunction; nasal airway dysfunction;
KW      antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW      antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW      antisense gene therapy; respiratory; lung; adenosine sensitivity;

adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
lung inflammation; respiratory disease; db.
Homo sapiens.
WO200285308-A2.
31-OCT-2002.
23-APR-2002; 2002WO-US013135.
24-APR-2001; 2001US-0286137P.
(EPIG-) EPIGENESIS PHARM INC.
NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
Miller S, Tang L, Shahabuddin S;
WPI; 2003-229219/22.
Pharmaceutical composition for treating ailments associated with impaired
respiration, has oligo(s) antisense to specific gene(s) or its
corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
ubiquinone.
Disclosure; SEQ ID NO 7521; 872pp; English.
The invention relates to a novel pharmaceutical composition, which has a
first active agent comprising an oligonucleotide antisense to the
initiation codon, coding region, 5' or 3' end genomic flanking regions,
5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
junctions of genes encoding a polypeptide associated with lung and/or
nasal airway dysfunction and a second active agent comprising an
antiinflammatory steroid and ubiquinone. A composition of the invention
has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
immunosuppressive, and cytostatic activity. The composition may have a
use in antisense gene therapy. The composition is useful for treating or
preventing a respiratory, lung or malignant disease or condition, also
for enhancing the prophylactic or therapeutic respiratory effect of an
antiinflammatory steroid in a subject, for reducing or depleting levels
of, or reducing sensitivity to adenosine, reducing levels of adenosine
receptor, producing bronchodilation, increasing levels of ubiquinone or
lung surfactant in a subject's tissue, or treating bronchoconstriction,
lung inflammation, lung allergies, or a respiratory disease or condition.
Note: The sequence data for this patent is not represented in the printed
specification, but was obtained in electronic format directly from WIPO
at ftp.wipo.int/pub/published_pct_sequences

Query Match      0.7%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.9e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      1022 TCCTTAGATGACTTCGTGCA 1041
      ||||| |||||
Db      1 TCCTTACTTGGCTTCGTGCA 20
      ||||| |||||

RESULT 163
ABD28509
ID      ABD28509 standard; DNA; 20 BP.
XX
AC      ABD28509;
XX
DT      29-JUL-2004 (first entry)
XX
DE      R33851-derived oligonucleotide SEQ ID 7521.
XX
KW      Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW      respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW      surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW      analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
```

KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
KW pulmonary transplantation rejection; ss; primer.

OS Homo sapiens.

PN WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

PA (EPIC-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense  
PT oligonucleotide containing less percentage of adenosine, targeted to  
PT nucleic acids associated with lung airway or lung dysfunction, and  
PT bronchodilating agent.

PS Claim 15; SEQ ID NO 7521; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,  
CC comprising oligonucleotides, effective for alleviating  
CC bronchoconstriction, respiratory tract inflammation, allergies and  
CC reducing adenosine sensitivity levels of adenosine (A) or (A) receptors,  
CC surfactant depletion or hyposecretion, when administered to a mammal. The  
CC oligonucleotides are derived from a gene encoding or regulating  
CC expression of a target polypeptide associated with lung airway or lung  
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.

CC The invention also describes a kit, that comprises: (a) a delivery  
CC device, in separate containers, (b) the oligonucleotides, (c)  
CC instructions for adding a carrier and for use of the kit. The composition  
CC of the invention has antiasthmatic, antiinflammatory, antiasthmatic,  
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
CC beta-adrenergic agonist. The composition is useful for preventing or  
CC treating a respiratory, lung or malignant disease. The administered  
CC composition comprises oligo and is administered to reduce the production  
CC or availability, or to increase the degradation of the target mRNA or to  
CC reduce the amount of target polypeptide present in the lungs. The  
CC pulmonary obstruction, and/or bronchoconstriction and/or lung  
CC inflammation, allergies and/or surfactant hypoproduction are associated  
CC with a disease or condition such as pulmonary vasoconstriction,  
CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to  
CC prevent any unwanted effects due to it

XX Sequence 20 BP; 2 A; 6 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1022 TCCTAGATGACCTTCTGTCA 1041

DB 1 TCCTACTGGCTTGTCA 20

RESULT 164

ADH10296/c

ID ADH10296 standard; DNA; 20 BP.

AC ADH10296;

XX 11-MAR-2004 (first entry)

XX Nucleotide sequence of PCR primer VR161.

XX D-LDH; pyruvate; D-lactate dehydrogenase; pyruvate decarboxylase; PDC1;  
KW fermentation; lactic acid; lactide; yeast; PCR; primer; ss.

XX Synthetic.

PN WO2003102201-A2.

XX 11-DEC-2003.

XX 30-MAY-2003; 2003WO-US017310.

XX 30-MAY-2002; 2002US-0384333P.

XX (CRGI ) CARGILL DOW LLC.

XX Rajgarhia V, Asleson C, Olson S, Suominen P, Hause B;

XX WPI; 2004-090666/09.

XX Recombinant yeast cell of species that does not naturally accumulate  
PT pyruvate, comprising exogenous D-lactate dehydrogenase gene integrated  
PT into its genome.

XX Example 1L; SEQ ID NO 25; 84pp; English.

XX The invention relates to a recombinant yeast cell (I) of a species that  
CC does not naturally accumulate pyruvate, comprising at least one exogenous  
CC D-lactate dehydrogenase (D-LDH) gene integrated into its genome, where  
CC the D-lactate dehydrogenase gene is operatively linked to a functional  
CC promoter and terminator sequences. The nucleotide sequence encodes a D-  
CC lactate dehydrogenase protein from *Lactobacillus helveticus*, *L.*  
CC *johnsonii*, *L. bulgaricus*, *L. delbrueckii*, *L. plantarum* and *L. pentosus*.  
CC The promoter is from a yeast species from the genera *Kluyveromyces* or  
CC *Saccharomyces*. (I) exhibits reduced pyruvate decarboxylase (PDC)  
CC activity. The D-LDH gene is integrated at the locus of a deleted PDC  
CC gene. (I) is useful for fermenting a carbohydrate to lactic acid. The  
CC above methods further involve converting at least a portion of the lactic  
CC acid to lactide, and polymerizing the lactide to form a polylactide  
CC polymer or copolymer. The present sequence represents a PCR primer for  
CC verifying the integration of a *L. helveticus* D-LDH gene fragment into the  
CC genome of *K. marxianus* CD21.

XX Sequence 20 BP; 6 A; 1 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1516 CCTTGTTAAATATGCCAAAT 1535

DB 20 CCTTGTTAAATATACCAACT 1

RESULT .165

ADH64784/c

ID ADH64784 standard; DNA; 20 BP.

XX ADH64784;

XX 25-MAR-2004 (first entry)

XX Human glucocorticoid receptor-specific antisense oligonucleotide #1618.

XX antisense oligonucleotide; glucocorticoid receptor; infection;

KW inflammation; tumour formation; diabetes; obesity;

KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;  
 XX phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.  
 OS Homo sapiens.  
 XX WO2003099215-A2.  
 XX PD 04-DEC-2003.  
 XX PF 20-MAY-2003; 2003WO-US016084.  
 XX PR 20-MAY-2002; 2002US-0381857P.  
 XX PA (PHAA ) PHARMACIA CORP.  
 PI Crosby SD, Nalseth AB;  
 XX WPI; 2004-035034/03.  
 XX New antisense compound targeted to a nucleic acid molecule encoding  
 PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,  
 PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.  
 XX Claim 4; SEQ ID NO 1618; 985pp; English.  
 XX The invention comprises an antisense oligonucleotides that are targeted  
 CC to nucleic acids encoding a mammalian glucocorticoid receptor. The  
 CC antisense oligonucleotides of the invention are useful for preventing or  
 CC delaying infection, inflammation or tumour formation. The antisense  
 CC oligonucleotides are also useful for treating diabetes, obesity,  
 CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The  
 CC present DNA sequence represents an antisense oligonucleotide that targets  
 CC the human glucocorticoid receptor gene. NOTE: The present sequence  
 CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.  
 XX Sequence 20 BP; 3 A; 6 C; 3 G; 8 T; 0 U; 0 Other;  
 SQ Query Match 0.7%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1483 TGGCAGAAAGCTGTTAAAC 1502  
 DB 20 TGGCAGAAAGCTGTTAAAC 1  
 RESULT 166  
 ADH64014/C  
 ID ADH64014 standard; DNA; 20 BP.  
 XX AC ADH64014;  
 XX DT 25-MAR-2004 (first entry)  
 XX DE Human glucocorticoid receptor-specific antisense oligonucleotide #848.  
 XX KW antisense oligonucleotide; glucocorticoid receptor; infection;  
 KW inflammation; tumour formation; diabetes; obesity;  
 KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;  
 KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.  
 XX OS Homo sapiens.  
 XX WO2003099215-A2.  
 XX PD 04-DEC-2003.  
 XX PF 20-MAY-2003; 2003WO-US016084.  
 XX PR 20-MAY-2002; 2002US-0381857P.  
 XX PA (PHAA ) PHARMACIA CORP.

PI Crosby SD, Nalseth AB;  
 XX WPI; 2004-035034/03.  
 XX New antisense compound targeted to a nucleic acid molecule encoding  
 PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,  
 PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.  
 XX Claim 4; SEQ ID NO 848; 985pp; English.  
 XX The invention comprises an antisense oligonucleotides that are targeted  
 CC to nucleic acids encoding a mammalian glucocorticoid receptor. The  
 CC antisense oligonucleotides of the invention are useful for preventing or  
 CC delaying infection, inflammation or tumour formation. The antisense  
 CC oligonucleotides are also useful for treating diabetes, obesity,  
 CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The  
 CC present DNA sequence represents an antisense oligonucleotide that targets  
 CC the human glucocorticoid receptor gene. NOTE: The present sequence  
 CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.  
 XX Sequence 20 BP; 9 A; 4 C; 1 G; 6 T; 0 U; 0 Other;  
 SQ Query Match 0.7%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 419 TTTAAGTATGTTGGGGAAT 438  
 DB 20 TTTCAGTATTTGGAGAAAT 1  
 RESULT 167  
 ADJ53522  
 ID ADJ53522 standard; DNA; 20 BP.  
 XX AC ADJ53522;  
 XX DT 06-MAY-2004 (first entry)  
 XX DE Human PPP3CB DNA antisense oligonucleotide #45.  
 XX KW Human; PPP3CB; ss; antisense oligonucleotide; phosphorothioate linkage;  
 KW 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; autoimmune disorder;  
 KW Alzheimer's disease; immunosuppressive; nootropic; neuroprotective.  
 XX OS Homo sapiens.  
 XX PN US2004023382-A1.  
 XX PD 05-FEB-2004.  
 XX PF 31-JUL-2002; 2002US-00210723.  
 XX PR 31-JUL-2002; 2002US-00210723.  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX PI Dean NM, Bennett CF, Dobie KW;  
 XX WPI; 2004-142663/14.  
 XX New compounds, particularly antisense oligonucleotides targeted to a  
 PT nucleic acid encoding PPP3CB, useful for treating an autoimmune disorder,  
 PT or Alzheimer's disease.  
 XX Example 15; SEQ ID NO 58; 91pp; English.  
 XX The invention relates to an antisense oligonucleotide targeted to a  
 CC nucleic acid encoding the human PPP3CB polypeptide and inhibits  
 CC expression of the PPP3CB polypeptide. The antisense oligonucleotide  
 CC comprises at least one modified internucleoside linkage, i.e. a  
 CC phosphorothioate linkage, at least one modified sugar moiety, preferably  
 CC a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase

CC comprising a 5-methylcytosine. The antisense oligonucleotides are useful  
 CC for inhibiting expression of the ppp3cb polypeptide and in preparation of  
 CC a composition for treating autoimmune disorders or Alzheimer's disease.  
 CC This sequence represents an antisense oligonucleotide of the invention.

XX  
 SQ Sequence 20 BP; 2 A; 8 C; 6 G; 4 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 GCAGGCTTTCGTCCTCCA 21  
 ||||| |||||  
 Db 1 GCAGGCTTCGCTCTCCA 20

RESULT 168  
 ADJ53590/c  
 ID ADJ53590 standard; DNA; 20 BP.

XX ADJ53590;  
 AC  
 XX  
 DT 06-MAY-2004 (first entry)  
 XX  
 DE Human PPP3CB DNA antisense oligonucleotide target region #41.

XX Human; PPP3CB; ss; antisense oligonucleotide; phosphorothioate linkage;  
 KW 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; autoimmune disorder;  
 KW Alzheimer's disease; immunosuppressive; nootropic; neuroprotective.

XX Homo sapiens.  
 OS  
 XX  
 PN US2004023382-A1.

XX 05-FEB-2004.

XX 31-JUL-2002; 2002US-00210723.

XX 31-JUL-2002; 2002US-00210723.

XX (ISIS-) ISIS PHARM INC.

XX Dean NM, Bennett CF, Dobie KW;  
 PI WPI; 2004-142663/14.  
 XX

XX New compounds, particularly antisense oligonucleotides targeted to a  
 PT nucleic acid encoding PPP3CB, useful for treating an autoimmune disorder,  
 PT or Alzheimer's disease.

XX Example 15; SEQ ID NO 126; 91pp; English.

XX The invention relates to an antisense oligonucleotide targeted to a  
 CC nucleic acid encoding the human PPP3CB polypeptide and inhibits  
 CC expression of the PPP3CB polypeptide. The antisense oligonucleotide  
 CC comprises at least one modified internucleoside linkage, i.e. a  
 CC phosphorothioate linkage, at least one modified sugar moiety, preferably  
 CC a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase  
 CC comprising a 5-methylcytosine. The antisense oligonucleotides are useful  
 CC for inhibiting expression of the PPP3CB polypeptide and in preparation of  
 CC a composition for treating autoimmune disorders or Alzheimer's disease.  
 CC This sequence represents an antisense oligonucleotide target region of  
 CC the invention.

XX  
 SQ Sequence 20 BP; 4 A; 6 C; 8 G; 2 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 GCAGGCTTTCGTCCTCCA 21  
 ||||| |||||  
 Db 20 GCAGGCTTCGCTCTCCA 1

RESULT 169  
 ADJ17322

ID ADJ17322 standard; DNA; 20 BP.

XX ADJ17322;

XX 20-MAY-2004 (first entry)

XX Antisense DNA oligo used to modulate human LRH1 expression SeqID 1872.

XX human; ss; liver related homologue-1; LRH1; NR5A2; antisense;  
 KW phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;  
 KW low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;  
 KW gall stone; triglyceridaemia; obesity; hepatitis;  
 KW hepatocellular carcinoma; aromatase; cytostatic; antilipaeamic;  
 KW antiarteriosclerotic; anorectic; hepatotropic; litholytic;  
 KW antiinflammatory; virucidal.

XX Homo sapiens.  
 OS  
 XX Synthetic.

XX Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /tag= b  
 FT /mod\_base= OTHER

FT /label= OTHER= phosphorothioate backbone  
 FT modified\_base 1..5  
 FT /tag= a

FT /mod\_base= OTHER  
 FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All  
 FT cytidine nucleobases are 5-methylcytidine."  
 FT modified\_base 16..20  
 FT /tag= c

FT /mod\_base= OTHER  
 FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All  
 FT cytidine nucleobases are 5-methylcytidine."  
 XX WO2004003201-A2.

XX 08-JAN-2004.

XX 01-JUL-2003; 2003WO-US020865.

XX 01-JUL-2002; 2002US-0392813P.

XX (PHAA ) PHARMACIA CORP.

XX Kane CD;

XX WPI; 2004-083058/08.

XX New antisense oligonucleotides targeted to a nucleic acid encoding liver  
 PT related homologue-1 (LRH1), useful for treating breast cancer,  
 PT dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.

XX Example 15; SEQ ID NO 1872; 909pp; English.

XX This invention relates to novel antisense compounds useful for modulating  
 CC the expression of liver related homologue-1 (LRH1) and splice variants  
 CC thereof. Specifically, it refers to compositions 8-30 nucleobases in  
 CC length that target a portion of an active site on the nucleic acid  
 CC molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan  
 CC nuclear receptor protein that functions as a tissue specific  
 CC transcription factor. The present invention describes antisense  
 CC oligonucleotides that comprise at least one modified internucleoside  
 CC linkage, a phosphorothioate linkage; at least one modified sugar moiety,  
 CC a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-  
 CC methylcytidine. These antisense compounds are useful for treating or  
 CC diagnosing a disease associated with LRH1, such as breast cancer,  
 CC dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high  
 CC LDL (low density lipoprotein), hypercholesterolaemia, gall stones,



CC triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic  
 CC hepatitis, as well as hepatocellular carcinoma or a condition associated  
 CC with aromatase activity. Accordingly, these compositions exhibit  
 CC cytotatic, antilipaeamic, antiarteriosclerotic, anorectic, hepatotropic,  
 CC litholytic, antiinflammatory and virucidal activities. This  
 CC oligonucleotide sequence is an antisense DNA oligo used to modulate the  
 CC expression of the human LRH1 protein of the invention.

XX  
 SQ Sequence 20 BP; 7 A; 4 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1921 CCAGTGTGTTGAATTGGAAG 1940  
 Db 1 CCAGTATCTGGAATTAGAAG 20  
 ||||| ||||| |||||

RESULT 170  
 ADJ17509  
 ID ADJ17509 standard; DNA; 20 BP.  
 AC ADJ17509;  
 XX  
 DT 20-MAY-2004 (first entry)  
 XX  
 DE Antisense DNA oligo used to modulate human LRH1 expression SeqID 2059.  
 KW human; ss; liver related homologue-1; LRH1; NR5A2; antisense;  
 KW phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;  
 KW low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;  
 KW gall stone; triglyceridaemia; obesity; hepatitis;  
 KW hepatocellular carcinoma; aromatase; cytostatic; antilipaeamic;  
 KW antiarteriosclerotic; anorectic; hepatotropic; litholytic;  
 KW antiinflammatory; virucidal.

XX  
 OS Homo sapiens.  
 OS Synthetic.

PH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /tag= b  
 FT /mod\_base= OTHER  
 FT /label= OTHER= phosphorothioate backbone  
 FT modified\_base 1..5  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All  
 FT cytidine nucleobases are 5-methylcytidine."  
 FT modified\_base 16..20  
 FT /tag= c  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All  
 FT cytidine nucleobases are 5-methylcytidine."  
 PN WO2004003201-A2.  
 XX  
 PD 08-JAN-2004.  
 XX  
 PF 01-JUL-2003; 2003WO-US020865.  
 XX  
 PR 01-JUL-2002; 2002US-0392813P.  
 XX  
 PA (PHAA ) PHARMACIA CORP.  
 XX  
 PI Kane CD;  
 XX  
 DR WPI; 2004-083058/08.  
 XX  
 PT New antisense oligonucleotides targeted to a nucleic acid encoding liver  
 PT related homologue-1 (LRH1), useful for treating breast cancer,  
 PT dyslipidaemia, atherosclerosis, hypercholesterolemia, or hepatitis.

XX  
 PS Example 15; SEQ ID NO 2059; 909pp; English.  
 XX  
 CC This invention relates to novel antisense compounds useful for modulating  
 CC the expression of liver related homologue-1 (LRH1) and splice variants  
 CC thereof. Specifically, it refers to compositions 8-30 nucleobases in  
 CC length that target a portion of an active site on the nucleic acid  
 CC molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan  
 CC nuclear receptor protein that functions as a tissue specific  
 CC transcription factor. The present invention describes antisense  
 CC oligonucleotides that comprise at least one modified internucleoside  
 CC linkage, a phosphorothioate linkage; at least one modified sugar moiety,  
 CC diagnosing a disease associated with LRH1, such as breast cancer,  
 CC dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high  
 CC LDL (low density lipoprotein), hypercholesterolaemia, gall stones,  
 CC triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic  
 CC hepatitis, as well as hepatocellular carcinoma or a condition associated  
 CC with aromatase activity. Accordingly, these compositions exhibit  
 CC cytotatic, antilipaeamic, antiarteriosclerotic, anorectic, hepatotropic,  
 CC litholytic, antiinflammatory and virucidal activities. This  
 CC oligonucleotide sequence is an antisense DNA oligo used to modulate the  
 CC expression of the human LRH1 protein of the invention.

XX  
 SQ Sequence 20 BP; 8 A; 3 C; 4 G; 5 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 15.2; DB 1; Length 20;  
 Best Local Similarity 85.0%; Pred. No. 1.9e+02;  
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1922 CCAGTGTGTTGAATTGGAAGA 1941  
 Db 1 CCAGTATCTGGAATTAGAAGA 20  
 ||||| ||||| |||||

RESULT 171  
 ADJ15993/c  
 ID ADJ15993 standard; DNA; 20 BP.  
 XX  
 AC ADJ15993;  
 XX  
 DT 20-MAY-2004 (first entry)  
 XX  
 DE Antisense DNA oligo used to modulate human LRH1 expression SeqID 543.  
 KW human; ss; liver related homologue-1; LRH1; NR5A2; antisense;  
 KW phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;  
 KW low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;  
 KW gall stone; triglyceridaemia; obesity; hepatitis;  
 KW hepatocellular carcinoma; aromatase; cytostatic; antilipaeamic;  
 KW antiarteriosclerotic; anorectic; hepatotropic; litholytic;  
 KW antiinflammatory; virucidal.

XX  
 OS Homo sapiens.  
 OS Synthetic.

PH Key Location/Qualifiers  
 FT modified\_base 1..20  
 FT /tag= b  
 FT /mod\_base= OTHER  
 FT /label= OTHER= phosphorothioate backbone  
 FT modified\_base 1..5  
 FT /tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All  
 FT cytidine nucleobases are 5-methylcytidine."  
 FT modified\_base 16..20  
 FT /tag= c  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All  
 FT cytidine nucleobases are 5-methylcytidine."  
 XX



PA (RAJG/) RAJGARHIA V.  
PA (DUND/) DUNDON C A.  
PA (OLSO/) OLSON S.  
PA (SUOM/) SUOMINEN P.  
PA (HAUS/) HAUSE B.  
XX  
XX Rajgarhia V, Dundon CA, Olson S, Suominen P, Hause B;  
XX WPI; 2004-224984/21.  
XX  
XX Novel recombinant yeast cell that does not naturally accumulate pyruvate  
PT and comprises exogenous D-lactate dehydrogenase gene integrated into the  
PT genome and operatively linked to promoter and terminator, useful for  
PT producing lactic acid.  
XX  
XX Example 1L; SEQ ID NO 25; 50pp; English.  
XX  
XX The invention relates to a recombinant yeast cell of a species that does  
CC not naturally accumulate pyruvate. The yeast cell comprises at least one  
CC exogenous D-lactate dehydrogenase (D-LDH) gene integrated into its  
CC genome, where the D-LDH gene is operatively linked to functional promoter  
CC and terminator sequences. The yeast cell which has reduced pyruvate  
CC decarboxylase (PDC) activity are useful for producing lactic acid used in  
CC producing lactide, cyclic anhydride of two lactic acid molecules. The  
CC present sequence is Lactobacillus helveticus D-LDH gene specific PCR  
CC primer. This sequence is used in the exemplification of the invention.  
XX  
XX Sequence 20 BP; 6 A; 1 C; 6 G; 7 T; 0 U; 0 Other;  
SQ  
Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 1516 CCTGTGTAATAATGCCAAAT 1535  
Db 20 CCTGTGTAATAATACCAACT 1  
  
RESULT 174  
AD054679/c  
ID AD054679 standard; DNA; 20 BP.  
XX  
XX AD054679;  
XX  
XX 15-JUL-2004 (first entry)  
XX  
XX Farnesoid X receptor gene expression antisense inhibitory oligo #2052.  
XX ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic;  
KW antiarteriosclerotic; hepatotropic; litholytic; anorectic;  
KW neuroprotective; vasotropic; antisense; gene therapy;  
KW Farnesoid X receptor; diabetes; immunological disorder;  
KW cardiovascular disorder; dyalipidemia; atherosclerosis;  
KW high density lipoprotein; low density lipoprotein; hypercholesterolemia;  
KW gallstones; hypertriglyceridemia; obesity; neurological disorder;  
KW ischemia; reperfusion; diagnostics; prophylaxis.  
XX  
XX Homo sapiens.  
XX  
XX WO2004030750-A1.  
XX  
XX 15-APR-2004.  
XX  
XX 25-SEP-2003; 2003WO-US030353.  
XX  
XX 25-SEP-2002; 2002US-0413588P.  
XX  
XX (PHAA ) PHARMACIA CORP.  
XX  
XX Kane CD;  
XX  
XX WPI; 2004-347928/32.  
XX

PT New antisense oligonucleotides useful for modulating expression of  
PT Farnesoid X Receptor (FXR) or for treating diseases associated with FXR,  
PT e.g. diabetes, immunological disorders, cardiovascular disorders,  
PT gallstones or obesity.  
XX  
XX Claim 4; SEQ ID NO 2052; 150pp; English.  
XX  
XX The invention relates to an antisense compound 8-30 nucleobases in length  
CC targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR),  
CC where the antisense compound specifically hybridizes with and inhibits  
CC the expression of FXR. The composition and methods are useful for  
CC inhibiting the expression of FXR (Farnesoid X receptor) in cells or  
CC tissues, or for treating diseases or conditions associated with FXR, such  
CC as diabetes, immunological disorders, cardiovascular disorders, e.g.  
CC dyslipidemia and its symptoms, atherosclerosis, low HDL (high density  
CC lipoprotein), elevated LDL (low density lipoprotein) or  
CC hypercholesterolemia, gallstones, hypertriglyceridemia, obesity,  
CC neurological disorders, or ischemia/reperfusion injury. In addition, the  
CC composition is used for diagnostics, prophylaxis, or as research reagents  
CC or kits. This sequence corresponds to an antisense oligonucleotide of the  
CC invention.  
XX  
XX Sequence 20 BP; 11 A; 4 C; 2 G; 3 T; 0 U; 0 Other;  
SQ  
Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 1825 ACACTGTGGAGTTTACTTTG 1844  
Db 20 ACACTTGGAGTTTCTTTTG 1  
  
RESULT 175  
ADK20853/c  
ID ADK20853 standard; DNA; 20 BP.  
XX  
XX ADK20853;  
XX  
XX 18-NOV-2004 (first entry)  
XX  
XX Acyl-coenzyme A synthetase 1, ACS1, antisense oligonucleotide #930.  
XX  
XX acyl-coenzyme A synthetase 1; ACS1; diabetes; obesity;  
KW metabolic syndrome X; cardiovascular disorder; cancer; infection;  
KW inflammation; tumour; antisense; ss.  
XX  
XX Synthetic.  
XX  
XX WO2004016749-A2.  
XX  
XX 26-PEB-2004.  
XX  
XX 14-AUG-2003; 2003WO-US025389.  
XX  
XX 14-AUG-2002; 2002US-0403591P.  
XX  
XX (PHAA ) PHARMACIA CORP.  
XX  
XX Ross SA;  
XX  
XX WPI; 2004-203782/19.  
XX  
XX New antisense compounds targeted to nucleic acid molecules encoding acyl-  
PT coenzyme A synthetase 1 (ACS1), useful for treating diseases or  
PT conditions associated with aberrant expression of ACS1, e.g. diabetes,  
PT obesity or cancer.  
XX  
XX Claim 3; SEQ ID NO 930; 940pp; English.  
XX  
XX The invention relates to an antisense compound targeted to a nucleic acid  
CC molecule encoding acyl-coenzyme A synthetase 1 (ACS1). The antisense  
CC compound specifically hybridizes with and inhibits the expression of

CC ACS1. The antisense oligonucleotides or compounds are useful for  
CC inhibiting the expression of acyl-coenzyme A synthetase 1 (ACS1), and for  
CC treating diseases or conditions associated with aberrant expression of  
CC ACS1, e.g. diabetes, obesity, metabolic syndrome X, cardiovascular  
CC disorder or cancer. The antisense compounds are also useful as research  
CC reagents and kits, or in diagnostic, therapeutic and prophylactic  
CC applications, e.g. to prevent or delay infection, inflammation or tumour  
CC formation. The present sequence represents an acyl-coenzyme A synthetase  
CC 1, ACS1, antisense oligonucleotide.  
XX  
SQ Sequence 20 BP; 6 A; 6 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1775 TAATCAAGCGCTGGGACTT 1794  
Db 20 TAATCAAGGGTTAGGACTT 1

RESULT 176  
ADK22867/C  
ID ADK22867 standard; DNA; 20 BP.

XX AC ADK22867;  
XX  
DT 18-NOV-2004 (first entry)  
XX  
DE Acyl-coenzyme A synthetase 1, ACS1, antisense oligonucleotide #2944.  
XX  
KW acyl-coenzyme A synthetase 1; ACS1; diabetes; obesity;  
KW metabolic syndrome X; cardiovascular disorder; cancer; infection;  
KW inflammation; tumour; antisense; ss.

XX Synthetic.

XX WO2004016749-A2.

XX 26-FEB-2004.

XX 14-AUG-2003; 2003WO-US025389.

XX 14-AUG-2002; 2002US-0403591P.

XX (PHAA ) PHARMACIA CORP.

XX Ross SA;

XX WPI; 2004-203782/19.

XX New antisense compounds targeted to nucleic acid molecules encoding acyl-coenzyme A synthetase 1 (ACS1), useful for treating diseases or conditions associated with aberrant expression of ACS1, e.g. diabetes, obesity or cancer.

PS Claim 3; SEQ ID NO 2944; 940pp; English.

XX The invention relates to an antisense compound targeted to a nucleic acid molecule encoding acyl-coenzyme A synthetase 1 (ACS1). The antisense compound specifically hybridises with and inhibits the expression of ACS1. The antisense oligonucleotides or compounds are useful for inhibiting the expression of acyl-coenzyme A synthetase 1 (ACS1), and for treating diseases or conditions associated with aberrant expression of ACS1, e.g. diabetes, obesity, metabolic syndrome X, cardiovascular disorder or cancer. The antisense compounds are also useful as research reagents and kits, or in diagnostic, therapeutic and prophylactic applications, e.g. to prevent or delay infection, inflammation or tumour formation. The present sequence represents an acyl-coenzyme A synthetase 1, ACS1, antisense oligonucleotide.

XX Sequence 20 BP; 12 A; 4 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 402 TGTTCGCAATTGAATGTTT 421  
Db 20 TGTTCGCTATTCTATGTTT 1

RESULT 177  
ADK21644  
ID ADK21644 standard; DNA; 20 BP.

XX AC ADK21644;

DT 18-NOV-2004 (first entry)

XX Acyl-coenzyme A synthetase 1, ACS1, antisense oligonucleotide #1721.  
XX  
KW acyl-coenzyme A synthetase 1; ACS1; diabetes; obesity;  
KW metabolic syndrome X; cardiovascular disorder; cancer; infection;  
KW inflammation; tumour; antisense; ss.

XX Synthetic.

XX WO2004016749-A2.

XX 26-FEB-2004.

XX 14-AUG-2003; 2003WO-US025389.

XX 14-AUG-2002; 2002US-0403591P.

XX (PHAA ) PHARMACIA CORP.

XX Ross SA;

XX WPI; 2004-203782/19.

XX New antisense compounds targeted to nucleic acid molecules encoding acyl-coenzyme A synthetase 1 (ACS1), useful for treating diseases or conditions associated with aberrant expression of ACS1, e.g. diabetes, obesity or cancer.

PS Claim 3; SEQ ID NO 1721; 940pp; English.

XX The invention relates to an antisense compound targeted to a nucleic acid molecule encoding acyl-coenzyme A synthetase 1 (ACS1). The antisense compound specifically hybridises with and inhibits the expression of ACS1. The antisense oligonucleotides or compounds are useful for inhibiting the expression of acyl-coenzyme A synthetase 1 (ACS1), and for treating diseases or conditions associated with aberrant expression of ACS1, e.g. diabetes, obesity, metabolic syndrome X, cardiovascular disorder or cancer. The antisense compounds are also useful as research reagents and kits, or in diagnostic, therapeutic and prophylactic applications, e.g. to prevent or delay infection, inflammation or tumour formation. The present sequence represents an acyl-coenzyme A synthetase 1, ACS1, antisense oligonucleotide.

XX Sequence 20 BP; 5 A; 6 C; 1 G; 8 T; 0 U; 0 Other;  
Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 852 AACTTCTCTCGACACTAA 871  
Db 1 AGCTTCTTCTTCACACTAA 20

RESULT 178  
ADG14108  
ID ADG14108 standard; DNA; 15 BP.

XX ADG14108;  
XX 26-FEB-2004 (first entry)  
XX Porcine reproductive and respiratory syndrome virus-related oligo 24.  
XX porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;  
XX immunoprotective; vaccine; ISU-55;  
XX porcine reproductive and respiratory disease; ss.  
XX Porcine reproductive and respiratory syndrome virus.  
XX WO9939582-A1.  
XX 12-AUG-1999.  
XX 08-FEB-1999; 99WO-US002630.  
XX 06-FEB-1998; 98US-00019793.  
XX (IOWA ) UNIV IOWA STATE RES FOUND INC.  
XX (AMCY ) AMERICAN CYANAMID CO.  
XX Paul PS, Zhang Y;  
XX WPI; 1999-527293/44.  
XX Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) DNA sequences  
and protein products.  
XX Example 8; Page 114; 214pp; English.  
XX DNA sequences encoding a porcine reproductive and respiratory syndrome  
virus (PRRSV) is new. New DNA sequences comprise a 15424 or 15113 bp  
sequence (isolates ISU-12 and ISU-55, respectively, given in the  
specification). The DNA sequences are designated as SEQ ID No. (ISU-12)  
and SEQ ID No. (ISU-55). INDEPENDENT CLAIMS are also included for the  
following: a DNA sequence encoding an open reading frame (ORF) of PRRSV  
ISU-12 or ISU-55 as above; a polypeptide encoded by a DNA sequence as  
above; a composition for inducing antibodies against PRRSV comprising one  
or more polypeptides of (1); and distinguishing PRRSV strain ISU-55 from  
other strains of PRRSV by: amplifying a DNA sequence of the PRRSV using  
primers (5SP) and (3RPLP); digesting the amplified sequence with DraI,  
and correlating the presence of 3 restriction fragments of 626, 187 and  
135 bp with a PRRSV ISU-55 strain; 5'-CGTACGGGATAGGACACC-3' (5SP) 5'-  
GGCATATCATCTACGCG-3' (3RPLP). Also disclosed are polypeptide sequences  
of ORFs 2-5 of ISU-12 and ISU-55. These sequences comprise 256, 254, 178  
and 200 amino acids, respectively (both isolates have identical length  
polypeptides encoded by the respective ORFs). Preferred Sequences: The  
ORFs (1a, 1b and 2-7) of PRRSV ISU-12 comprise nucleotides 191-7387, 7375  
-11757, 11762-12529, 12385-213116, 12930-13463, 13477-14077, 14064-14585  
and 14578-14946 of the 15424 bp sequence. The ORFs (1a, 1b and 2-7) of  
PRRSV ISU-55 comprise nucleotides 191-7699, 7687-12069, 12074-12841,  
12692-13458, 13212-13775, 13789-14388, 14376-14592 and 14890-15258 of the  
15113 bp sequence. Antiviral; Immunoprotective. None given. The vaccine  
can be administered orally or parentally. Administration may be  
intramuscularly, intradermally, intravenously, intraperitoneally,  
subcutaneously or intranasally. All claimed. The ISU-55 polypeptides can  
be used to induce antibodies against PRRSV effective to induce the  
antibodies in a pig. Compositions comprising the ISU-55 polypeptides can  
be used as vaccines to protect pigs from a porcine reproductive and  
respiratory disease (claimed). ISU-55 polypeptides can be used to induce  
antibodies in pigs. The lung lesions in 5-week old colostrum-deprived,  
caesarian-derived pigs are reduced by a statistically significant amount,  
where the significant amount is a p value less than 0.01, relative to  
lung lesions in uninoculated 5-week old colostrum-deprived, caesarian-  
derived pigs (claimed). None given.

XX Sequence 15 BP; 5 A; 2 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.1e+02;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1503 AGGGAGTGTAAACC 1517  
|||||  
Db 1 AGGGAGTGTAAACC 15  
RESULT 179  
AAQ63590/C  
ID AAQ63590 standard; DNA; 19 BP.  
XX AAQ63590;  
XX 25-MAR-2003 (revised)  
DT 12-DEC-1994 (first entry)  
XX ISU-12 ORF 7 primer #2.  
XX Primer; polymerase chain reaction; PCR; amplify; probe; Iowa strain;  
KW infectious agent; porcine respiratory and reproductive syndrome; ISU-12;  
KW vaccine; porcine respiratory and reproductive disease; PRRD; antibody;  
KW assay; ss.  
XX Synthetic.  
XX EP595436-A2.  
XX 04-MAY-1994.  
XX 29-OCT-1993; 93EP-00203042.  
XX 30-OCT-1992; 92US-00969071.  
PR 05-OCT-1993; 93US-00131625.  
XX (SOLV ) SOLVAY ANIMAL HEALTH INC.  
PA (IOWA ) UNIV IOWA STATE RES FOUND INC.  
XX Paul PS, Halbur PG, Meng X, Lum MA, Lyoo YS;  
XX WPI; 1994-146025/18.  
XX New porcine respiratory and reproductive disease virus - used to prepare  
PT vaccines and antibodies for diagnosis, treatment and prophylaxis of virus  
PT infection.  
XX Example 4; Page 26; 98pp; English.  
XX The sequences given in AAQ63585-90 are primers which were used in the  
CC amplification of ORF-5, ORF-6 and ORF-7 of the infectious agent  
CC associated with the Iowa strain of porcine respiratory and reproductive  
CC syndrome, termed ISU-12. The isolated ISU-12 sequence may be used to  
CC infect cells and from these, the vaccine of the invention can be  
CC produced. This vaccine may be used for protecting pigs against a porcine  
CC respiratory and reproductive disease (PRRD). Antibodies to the vaccine  
CC may also be used in treating PRRD and for assaying for the virus.  
CC (Updated on 25-MAR-2003 to correct PN field.)  
XX Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;  
Query Match 0.7%; Score 15; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.8e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1940 GAATGCGTGTGAAT 1954  
|||||  
Db 19 GAATGCGTGTGAAT 5  
RESULT 180  
AAAT14403/C  
ID AAAT14403 standard; DNA; 19 BP.  
XX AAAT14403;  
AC AAAT14403;

```

XX 05-AUG-1996 (first entry)
XX PRRSV VR 2385 ORF-7 PCR primer.
XX
XX Porcine reproductive and respiratory syndrome virus; PRRSV; vaccine;
XX antigen; baculovirus; vector; Hi-Five; insect; polymerase chain reaction;
XX PCR; primer; ss.
XX
XX Synthetic.
XX
XX WO9606619-A1.
XX
XX 07-MAR-1996.
XX
XX 01-SEP-1995; 95WO-US010904.
XX
XX 01-SEP-1994; 94US-00301435.
XX
XX (PAUL/) PAUL P S.
XX (MENG/) MENG X.
XX (HALB/) HALBUR P.
XX (MORO/) MOROZOV I.
XX (LUMM/) LUM M A.
XX
XX Paul PS, Meng X, Halbur P, Morozov I, Lum MA;
XX WPI; 1996-160132/16.
XX
XX New porcine reproductive and respiratory syndrome virus DNA - and
XX proteins encoded by open reading frames of an Iowa strain of the virus;
XX are used in vaccines against PRRSV in pigs.
XX
XX Disclosure; Page 71; 228pp; English.
XX
XX 2 Primers (AAT14402 and AAT14403) were used to amplify ORF-7 (see also
XX AAT14392) of porcine reproductive and respiratory syndrome virus (PRRSV)
XX Iowa strain isolate ISU-12 (VR 2385). ORF-5 (AAT14390) was amplified
XX using 2 other primers (AAT14398-99) and ORF-6 (AAT14391) using 2 further
XX primers (AAT14400-02). Amplified fragments were cloned into baculovirus
XX transfer vector pVL1393 and used for prodn. of recombinant Iowa strain
XX infectious agent proteins (ORF5-7 products, see also AAR94701-03) in Hi-
XX Five insect cells. These proteins can be used in subunit vaccines against
XX PRRSV in pigs. Primer AAT14403 was also used with primer AAT14400 to
XX amplify the putative M and N genes of PRRSV isolates
XX
XX Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 15; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 1.8e+02;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1940 GAATCGGTGGTGAAT 1954
XX |||||
XX Db 19 GAATCGGTGGTGAAT 5
XX
XX RESULT 181
XX ADG14133/c
XX ID ADG14133 standard; DNA; 19 BP.
XX
XX AC ADG14133;
XX
XX DT 26-FEB-2004 (first entry)
XX
XX DE Porcine reproductive and respiratory syndrome virus PCR primer 23.
XX
XX KW porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;
XX immunoprotective; vaccine; ISU-55;
XX KW porcine reproductive and respiratory disease; PCR; primer; ss.
XX
XX OS Porcine reproductive and respiratory syndrome virus.
XX

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PN WO9939582-A1.
XX
XX PD 12-AUG-1999.
XX
XX PF 08-FEB-1999; 99WO-US002630.
XX
XX PR 06-FEB-1998; 98US-00019793.
XX
XX PA (IOWA ) UNIV IOWA STATE RES FOUND INC.
XX (AMCY ) AMERICAN CYANAMID CO.
XX
XX PI Paul PS, Zhang Y;
XX
XX DR WPI; 1999-527293/44.
XX
XX PT Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) DNA sequences
XX and protein products.
XX
XX PS Example 5; Page 91; 214pp; English.
XX
XX CC This invention relates to novel DNA and polypeptide sequences (ISU-55) of
XX a porcine reproductive and respiratory syndrome virus (PRRSV). The
XX invention may allow development of compounds with antiviral or
XX immunoprotective activity or a vaccine. The ISU-55 polypeptides can be
XX used to induce antibodies against PRRSV effective to induce the
XX antibodies in a pig. Compositions comprising the ISU-55 polypeptides can
XX be used as vaccines to protect pigs from a porcine reproductive and
XX respiratory disease. The ISU-55 polypeptides can be used to induce
XX antibodies in pigs.
XX
XX SQ Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 15; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 1.8e+02;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1940 GAATCGGTGGTGAAT 1954
XX |||||
XX Db 19 GAATCGGTGGTGAAT 5
XX
XX RESULT 182
XX ADR76521/c
XX ID ADR76521 standard; DNA; 19 BP.
XX
XX AC ADR76521;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 1006.
XX
XX KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
XX cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
XX RNA interference; iRNA; antisense technology; lipid metabolism;
XX cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
XX coronary artery disease; CAD; coronary heart disease; CHD;
XX atherosclerosis; hepatic glucose production;
XX glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
XX colon cancer; lung cancer; neurological disease; Huntington disease;
XX spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO2004080406-A2.
XX
XX PD 23-SEP-2004.
XX
XX PF 08-MAR-2004; 2004WO-US007070.
XX
XX PR 07-MAR-2003; 2003US-0452682P.
XX
XX PR 12-MAR-2003; 2003US-0454265P.
XX
XX PR 13-MAR-2003; 2003US-0454962P.
XX
XX PR 13-MAR-2003; 2003US-0455050P.
XX

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PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS Example 5; SEQ ID NO 1006; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 7 A; 4 C; 2 G; 6 T; 0 U; 0 Other;  
 SQ Query Match 0.7%; Score 15; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+02;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 287 CATGTCACGGAATTT 301  
 Db |||||  
 19 CATGTCACGGAATTT 5  
 RESULT 183  
 ADR79465/c  
 ID ADR79465 standard; DNA; 19 BP.  
 XX ADR79465;  
 AC ADR79465;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3950.  
 DE

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; anti-diabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 PN 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 PF 07-MAR-2003; 2003US-0452682P.  
 XX 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 PS Example 5; SEQ ID NO 3950; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX Sequence 19 BP; 7 A; 4 C; 2 G; 6 T; 0 U; 0 Other;  
 SQ Query Match 0.7%; Score 15; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+02;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 287 CATGTCACGGAATTT 301  
 Db |||||  
 19 CATGTCACGGAATTT 5  
 RESULT 183  
 ADR79465/c  
 ID ADR79465 standard; DNA; 19 BP.  
 XX ADR79465;  
 AC ADR79465;  
 XX 16-DEC-2004 (first entry)  
 DT Human apolipoprotein B (ApoB) oligonucleotide seqid 3950.  
 DE

CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 7 A; 4 C; 2 G; 6 T; 0 U; 0 Other;

SQ Query Match 0.7%; Score 15; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.8e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 287 CATGTCAGGAATTT 301  
|||||  
D5 19 CATGTCAGGAATTT 5

RESULT 184  
AD115600  
ID AD115600 standard; DNA; 20 BP.

XX AC AD115600;

XX DT 22-APR-2004 (first entry)

XX DE Human phosphodiesterase 4D antisense oligonucleotide #26.

XX KW cytostatic; cardiant; antiinflammatory; antimicrobial; antisense therapy;  
KW phosphodiesterase inhibitor 4D; phosphodiesterase 4D; cancer;  
KW cardiovascular disease; inflammation; infection; inflammation;  
KW tumour formation; antisense technology; human; ss.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers

FT modified\_base 1..20

FT /\*tag= b

FT /mod\_base= OTHER

FT /note= "OTHER= Phosphorothioate backbone. All cytidines  
are 5-methylcytidines"

FT modified\_base 1..5

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"

FT modified\_base 15..20

FT /\*tag= c

FT /mod\_base= OTHER

FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"

XX FT US2003220273-A1.

XX PN 27-NOV-2003.

XX PD 15-MAY-2002; 2002US-00146860.

XX PF 15-MAY-2002; 2002US-00146860.

XX PR (ISIS-) ISIS PHARM INC.

XX PA Bennett CP, Dobie KW, Roach MP;

XX PI WPI; 2004-060214/06.

XX DR New antisense compounds targeted to nucleic acid molecules encoding  
phosphodiesterase 4D, useful for treating diseases associated with  
expression of phosphodiesterase 4D, e.g. cancer, cardiovascular disease  
or inflammation.

XX PS Example 15; SEQ ID NO 54; 72pp; English.

XX CC The invention describes a compound 8-80 nucleobases in length targeted to  
a nucleic acid molecule encoding phosphodiesterase 4D. The compound  
specifically hybridises with the nucleic acid molecule encoding  
phosphodiesterase 4D and inhibits the expression of phosphodiesterase 4D,  
or specifically hybridises with at least an 8-nucleobase portion of an  
active site on a nucleic acid molecule encoding phosphodiesterase 4D. The

CC antisense oligonucleotides and compounds are useful for modulating the  
CC expression of phosphodiesterase 4D, and for treating diseases or  
CC conditions associated with expression of phosphodiesterase 4D, e.g.  
CC cancer, cardiovascular disease or inflammation. The antisense compounds  
CC are also useful as research reagents and kits, or in diagnostic,  
CC therapeutic and prophylaxis applications, e.g. to prevent or delay  
CC infection, inflammation or tumour formation. This sequence represents a  
CC human phosphodiesterase 4D antisense oligonucleotide.

XX SQ Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 15; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 2e+02;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 105 CCGTGATATCACTG 119  
|||||  
D5 5 CCGTGATATCACTG 19

RESULT 185

AAT89137/C

ID AAT89137 standard; RNA; 18 BP.

XX AC AAT89137;

XX DT 04-MAR-1998 (first entry)

XX DE Lutetium texaphyrin RNA conjugate for light induced cleavage of DNA.

XX KW Photosensitive; texaphyrin; DNA cleavage; light induced; photocleavage;

XX KW Lutetium; RNA; ss.

XX OS Synthetic.

XX FH Key Location/Qualifiers

FT misc\_binding 1..18

FT /\*tag= b

FT /note= "this region binds to AAT89138"

FT misc\_feature 1

FT /\*tag= a

FT /mod\_base

FT /note= "modified by lutetium(III) texaphyrin compound"

FT misc\_feature 18

FT /\*tag= c

FT /note= "modified by a methyl group"

XX WO9609315-A1.

XX PN 28-MAR-1996.

XX PD 21-SEP-1995; 95WO-US012312.

XX PF 21-SEP-1994; 94US-00310501.

XX PR 06-JUN-1995; 95US-00469177.

XX PA (TEXA ) UNIV TEXAS SYSTEM.

XX PHAR-) PHARMACYCLICS INC.

XX PI Magda D, Sessler JL, Iverson BL, Sansom PI, Wright M, Mody TD;

XX PI Hemmi GW;

XX DR WPI; 1996-200644/20.

XX PS Use of photosensitive texaphyrin cpds. - for light-induced cleavage of  
polymers of deoxyribonucleic acid in analyses or therapy.

XX PS Example 9; Fig 4; 81pp; English.

XX CC The present sequence represents RNA coupled to a photosensitive  
texaphyrin molecule, which was used in a new method for photocleavage of  
DNA. Targeted intracellular light-induced cleavage of a selected DNA  
comprises introducing into a cell a photosensitive texaphyrin (Pt)



CC coupled to an oligonucleotide which is complementary to the selected DNA  
 CC and exposing the cell to light to cleave the DNA. Modulating the activity  
 CC of a selected DNA comprises contacting the DNA with a PT coupled to an  
 CC oligonucleotide which binds to the DNA and exposing the DNA-PT mixture to  
 CC light to cleave the DNA. These methods can be used e.g. in cleavage of  
 CC DNA in footprinting analysis. DNA sequencing, chromosome analyses, gene  
 CC isolation, recombinant DNA manipulations, mapping of large genomes and  
 CC chromosomes and for site-directed mutagenesis. They can also be used in  
 CC anti-viral therapy and for the treatment of cancers, inflammatory  
 CC responses that are caused by over expression of certain proteins,  
 CC infectious diseases and genetically-based disorders

SQ Sequence 18 BP; 0 A; 5 C; 0 G; 13 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.8; DB 1; Length 18;

Best Local Similarity 88.9%; Pred. No. 1.7e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1651 GAAAGAAAATAGAGGA 1668

DB 18 GAAAGAAAAGAGAGGA 1

RESULT 186

ACF63212

ID ACF63212 standard; DNA; 18 BP.

XX

AC ACF63212;

XX

DT 09-OCT-2003 (first entry)

XX

DE Human p53 PCR primer SEQ ID NO:461.

XX

KW Human; colon cancer; oestrogen receptor; myoglobin; p21; p27; p16; p53;

KW progesterone receptor; pcna; cdc2; c-erbB2; methylation; CpG;

KW characterisation; classification; diagnosis; differentiation;

KW colon cell proliferative disorder; PCR primer; ss.

XX

OS Homo sapiens.

OS Synthetic.

XX

PN WO2003014388-A2.

XX

PD 20-FEB-2003.

XX

PF 09-AUG-2002; 2002WO-EP008939.

XX

PR 09-AUG-2001; 2001DE-01039283.

XX

PA (SPIG-) EPIGENOMICS AG.

XX

PI Distler J, Model F, Taubert H;

XX

DR WPI; 2003-256600/25.

XX

XX The present invention describes a method for determining the methylation

CC status of CpG dinucleotides within the genes for oestrogen receptor, p21,

CC p27, p16, progesterone receptor, myoglobin, pcna, cdc2, c-erbB2, p53

CC and/or CEA, which comprises contacting the target nucleic acid with a

CC reagent that distinguishes between methylated and non-methylated CpG

CC dinucleotides, and determining from the methylation status of the CpG

CC positions the presence of a colon cancer. A set of oligomers or peptide

CC nucleic acid (PNA)-oligomers can be used as probes for determining the

CC cytosine methylation state and/or single nucleotide polymorphisms (SNP)

CC of a corresponding genomic DNA by analysis of a chemically pretreated

CC genomic DNA. The pretreated genomic DNA is useful for the determination

CC of the methylation status of a corresponding genomic DNA and/or detection

CC of SNPs. The methods and pretreated genomic DNA are also useful for the

CC characterisation, classification, diagnosis and differentiation of colon

CC cell proliferative disorders. ACF63212 to ACF63278 represent sequences

CC used in the exemplification of the present invention

XX

SQ Sequence 18 BP; 6 A; 0 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.8; DB 1; Length 18;

Best Local Similarity 88.9%; Pred. No. 1.7e+02;

Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 409 AATTGCAATGTTTAACTA 426

DB 1 AAGTTCAATGTTTAACTA 18

RESULT 187

ADB54710

ID ADB54710 standard; DNA; 18 BP.

XX

AC ADB54710;

XX

DT 04-DEC-2003 (first entry)

XX

DE Hybridisation oligonucleotide 248 used to analyse genomic DNA region.

XX colon cell proliferative disorder; non methylated CpG dinucleotide;

KW cytostatic; cancer; adenoma; carcinoma; cytosine methylation state; ss;

KW probe.

XX

OS Unidentified.

XX

PN WO2003072821-A2.

XX

PD 04-SEP-2003.

XX

PF 27-FEB-2003; 2003WO-EP002035.

XX

PR 27-FEB-2002; 2002EP-00004551.

XX

PA (SPIG-) EPIGENOMICS AG.

XX

PI Adorjan P, Burger M, Maier S, Nimmrich I, Becker E, Lesche R;

XX Rujan T, Schmitt A;

XX WPI; 2003-731620/69.

XX

PT Detecting and differentiating between colon cell proliferative disorders

XX associated with a gene or its regulatory regions comprises contacting a

XX target nucleic acid in a biological sample obtained from the subject with

XX a reagent.

XX

PS Claim 36; Page 41; 74pp; English.

XX

XX The invention relates to a novel method for detecting and differentiating

CC between colon cell proliferative disorders associated with at least one

CC gene or its regulatory regions. The method comprises contacting a target

CC nucleic acid in a biological sample obtained from the subject with at

CC least one reagent or a series of reagents, where the reagent or series of

CC reagents, distinguishes between methylated and non methylated CpG

CC dinucleotides within the target nucleic acid. The molecules of the

CC invention demonstrate cytosine methylation state or single nucleotide

CC for detecting and differentiating between colon cell proliferative

CC disorders, including cancers such as colon adenoma and colon carcinoma.

CC The PNA (peptide nucleic acid)-oligomers are useful as probes for

CC determining cytosine methylation state or single nucleotide

CC polymorphisms. The current sequence is that of the hybridisation

CC oligonucleotide of the invention which was used to analyse the genomic

CC DNA region.

XX

SQ Sequence 18 BP; 6 A; 0 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.8; DB 1; Length 18;

Query Match 0.7%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 1.7e+02;

XX AAV58063;  
XX 24-NOV-1998 (first entry)  
XX Humanised variable heavy chain PCR primer vh611r.  
XX Hepatitis B surface antigen; HBsAg; MHC class II-restricted peptide;  
XX vaccination; vaccine; MHC class I molecule; immune response; cancer;  
XX major histocompatibility complex molecule; pathogenic organism;  
XX viral disease; autoimmune condition; allergy; PCR primer; ss.  
XX Synthetic.  
XX WO9833523-A1.  
XX 06-AUG-1998.  
XX 02-FEB-1998; 98WO-GB000325.  
XX 31-JAN-1997; 97GB-00001999.  
XX 05-JUL-1997; 97GB-00014182.  
XX 07-AUG-1997; 97GB-00016620.  
XX 07-AUG-1997; 97GB-00016641.  
XX 21-NOV-1997; 97GB-00024584.  
XX (BIOV-) BIOVATION LTD.  
XX Carr FJ, Carter G;  
XX WPI; 1998-437178/37.  
XX Immunogenic molecules - comprising nucleic acid and polypeptide portion,  
XX from both of which peptide for presentation on major histocompatibility  
XX complex molecules can be derived.  
XX Example 10; Page 54; 87pp; English.  
XX A molecule has been developed which comprises: (a) a nucleic acid portion  
XX from which at least one peptide for presentation of MHC class I or class  
XX II molecules, or both, may be derived, and (b) a polypeptide portion,  
XX from which at least 1 peptide for presentation on MHC class I or class II  
XX molecules, or both, may be derived. Also described in the present  
XX invention is another molecule comprising: (a) a nucleic acid portion from  
XX which at least 1 peptide for presentation on MHC class I or class II  
XX molecules, or both, may be derived, and (b) a polypeptide portion  
XX comprising a recognition domain capable of targeting the molecule to an  
XX antigen presenting cell (APC), where the polypeptide portion does not  
XX comprise a specific antigen binding site. The molecules can be used to  
XX induce immune responses to treat or prevent, e.g. diseases caused by  
XX pathogenic organisms, cancers, viral disease, e.g. HIV or hepatitis  
XX infection, autoimmune conditions, e.g. Grave's disease, multiple  
XX sclerosis, systemic lupus erythematosus, diabetes mellitus, Kawasaki's  
XX disease, rheumatoid arthritis or allergies, e.g. atopic dermatitis,  
XX allergic rhinitis, allergic conjunctivitis, atopic asthma or eczema. The  
XX combination of DNA and polypeptide in the same molecule can give rise not  
XX only to a combination of MHC class I- and MHC class II-mediated immune  
XX responses but also to an enhancement of these responses compared to the  
XX responses given by either DNA or polypeptide alone. The present sequence  
XX represents a PCR primer used in an example from the present invention  
XX  
SQ Sequence 19 BP; 7 A; 4 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 0.7%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 1.9e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 701 TCTGGTCACTGTCTCTAC 718  
Db 19 TCTGGTCACTGTCTCTGC 2  
RESULT 191  
AAV81082/c  
ID AAV81082 standard; DNA; 19 BP.  
XX AAV81082;  
XX 03-MAR-1999 (first entry)

AAV81132/c  
ID AAV81132 standard; DNA; 19 BP.  
XX AAV81132;  
XX 03-MAR-1999 (first entry)  
XX Chimeric 708 Vh constructing flanking primer VH611R.  
XX Non-immunogenic; epitope; T-cell; immunogenicity; immune system; SK;  
XX immunoglobulin; therapeutic; streptokinase; chimeric; 708; primer; ss.  
XX Synthetic.  
XX Homo sapiens.  
XX Mus sp.  
XX WO9852976-A1.  
XX 26-NOV-1998.  
XX 21-MAY-1998; 98WO-GB001473.  
XX 21-MAY-1997; 97GB-00010480.  
XX 31-JUL-1997; 97GB-00016197.  
XX 28-NOV-1997; 97GB-00025270.  
XX 02-DEC-1997; 97US-0067235P.  
XX 14-APR-1998; 98GB-00007751.  
XX (BIOV-) BIOVATION LTD.  
XX Carr FJ;  
XX WPI; 1999-045301/04.  
XX Reducing immunogenicity of proteins - by modifying the amino acid  
XX sequence of the protein to eliminate potential epitopes for T-cells of a  
XX given species.  
XX Example 4; Fig 23; 77pp; English.  
XX The invention relates to a method for the production of non-immunogenic  
XX proteins. The method comprises determining at least part of the amino  
XX acid sequence of the protein; (b) identifying in the amino acid sequence  
XX one or more potential epitopes for T-cells (T-cell epitopes) of the given  
XX species; and (c) modifying the amino acid sequence to eliminate at least  
XX one of the T-cell epitopes identified in step (b) thereby to eliminate or  
XX reduce the immunogenicity of the protein when exposed to the immune  
XX system of the given species. A method of analysing a pre-existing protein  
XX to predict the basis for immunogenic responses is also provided. The  
XX methods can be used particularly for reducing the immunogenicity of  
XX immunoglobulins or therapeutic proteins, e.g. Streptokinase (SK). The  
XX products can be used for diagnosis and therapy. Sequences AAV81123-139  
XX represent oligonucleotides used for the construction of chimeric 708 Vh  
XX and V1  
SQ Sequence 19 BP; 7 A; 4 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 0.7%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 1.9e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 701 TCTGGTCACTGTCTCTAC 718  
Db 19 TCTGGTCACTGTCTCTGC 2  
RESULT 192  
AAV81082/c  
ID AAV81082 standard; DNA; 19 BP.  
XX AAV81082;  
XX 03-MAR-1999 (first entry)

XX DE Vaccine 1 708 Vh constructing flanking primer VH611R.  
 XX KW Non-immunogenic; epitope: T-cell; immunogenicity; immune system; SK;  
 KW immunoglobulin; therapeutic; streptokinase; vaccine; 708; primer; ss.  
 XX OS Synthetic.  
 XX PN WO9852976-A1.  
 XX PD 26-NOV-1998.  
 XX PF 21-MAY-1998; 98WO-GB001473.  
 XX PR 21-MAY-1997; 97GB-00010480.  
 PR 31-JUL-1997; 97GB-00016197.  
 PR 28-NOV-1997; 97GB-00025270.  
 PR 02-DEC-1997; 97US-0067235P.  
 PR 14-APR-1998; 98GB-00007751.  
 XX PA (BIOV-) BIOVATION LTD.  
 XX PI Carr FJ;  
 XX DR WPI; 1999-045301/04.  
 XX PT Reducing immunogenicity of proteins - by modifying the amino acid  
 PT sequence of the protein to eliminate potential epitopes for T-cells of a  
 PT given species.  
 XX PS Example 4; Fig 18; 77pp; English.  
 XX CC The invention relates to a method for the production of non-immunogenic  
 CC acids. The method comprises determining at least part of the amino  
 CC acid sequence of the protein; (b) identifying in the amino acid sequence  
 CC one or more potential epitopes for T-cells (T-cell epitopes) of the given  
 CC species; and (c) modifying the amino acid sequence to eliminate at least  
 CC one of the T-cell epitopes identified in step (b) thereby to eliminate or  
 CC reduce the immunogenicity of the protein when exposed to the immune  
 CC system of the given species. A method of analysing a pre-existing protein  
 CC to predict the basis for immunogenic responses is also provided. The  
 CC methods can be used particularly for reducing the immunogenicity of  
 CC immunoglobulins or therapeutic proteins, e.g. Streptokinase (SK). The  
 CC products can be used for diagnosis and therapy. Sequences AA81069-89  
 CC represent oligonucleotides used for the construction of vaccine 1 708 Vh  
 CC and VI  
 XX SQ Sequence 19 BP; 7 A; 4 C; 6 G; 2 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.8; DB 1; Length 19;  
 Best Local Similarity 88.9%; Pred. No. 1.9e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 701 TCTGGTCACTGTCTTAC 718  
 Db 19 TCTGGTCACTGTCTTGC 2  
 RESULT 193  
 AAZ70215  
 ID AAZ70215 standard; DNA; 19 BP.  
 XX AC AAZ70215;  
 XX DT 10-SEP-2001 (first entry)  
 XX DE Human biallelic marker upstream amplification primer SEQ ID NO:4571.  
 XX KW Human genome; biallelic marker; high density disequilibrium map;  
 KW genomic map; haplotype; phenotype; polymorphic base; genotyping;  
 KW haplotyping; hybridisation; identification; characterisation;  
 KW amplification; single nucleotide polymorphism; SNP; PCR primer;  
 KW diagnosis; ss.

XX OS Homo sapiens.  
 XX PN WO9954500-A2.  
 XX PD 28-OCT-1999.  
 XX PF 21-APR-1999; 99WO-IB000822.  
 PR 21-APR-1998; 98US-0082614P.  
 PR 23-NOV-1998; 98US-0109732P.  
 XX PA (GEST ) GENSET.  
 XX PI Cohen D, Blumenfeld M, Chumakov I;  
 XX DR WPI; 2000-013267/01.  
 XX PT Novel biallelic markers used to construct a high density disequilibrium  
 PT map of the human genome.  
 XX PS Claim 8; Page 1205; 2745pp; English.  
 XX CC AAZ65654 to AAZ69578 represent human biallelic markers from the present  
 CC invention, which contain a polymorphic base at position 24 of their  
 CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
 CC primers for the biallelic markers. The biallelic markers of the invention  
 CC have a variety of uses: they can be used for high density mapping of the  
 CC human genome, and in complex association studies and haplotyping studies  
 CC which are useful in determining the genetic basis for disease states.  
 CC Compositions and methods of the invention can also be useful for the  
 CC identification of the targets for the development of pharmaceutical  
 CC agents and diagnostic methods, as well as the characterisation of the  
 CC differential efficacious responses to and side effects from  
 CC pharmaceutical agents acting on a disease as well as other treatment.  
 CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
 CC 3367, are not actually given a sequence in the Sequence Listing from the  
 CC present invention  
 XX SQ Sequence 19 BP; 6 A; 6 C; 2 G; 5 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.8; DB 1; Length 19;  
 Best Local Similarity 88.9%; Pred. No. 1.9e+02;  
 Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 18 TCCAGACATCATCTGCCC 35  
 Db 1 TCCAGACATTAATTGCC 18  
 RESULT 194  
 AAZ71810/C  
 ID AAZ71810 standard; DNA; 19 BP.  
 XX AC AAZ71810;  
 XX DT 10-SEP-2001 (first entry)  
 XX DE Human biallelic marker upstream amplification primer SEQ ID NO:6166.  
 XX KW Human genome; biallelic marker; high density disequilibrium map;  
 KW genomic map; haplotype; phenotype; polymorphic base; genotyping;  
 KW haplotyping; hybridisation; identification; characterisation;  
 KW amplification; single nucleotide polymorphism; SNP; PCR primer;  
 KW diagnosis; ss.  
 XX OS Homo sapiens.  
 XX PN WO9954500-A2.  
 XX PD 28-OCT-1999.  
 XX PF 21-APR-1999; 99WO-IB000822.

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XX 21-APR-1998; 98US-0082614P.
PR 23-NOV-1998; 98US-0109732P.
XX (GEST ) GENSET.
XX Cohen D, Blumenfeld M, Chumakov I;
XX WPI; 2000-013267/01.
XX Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome.
XX Claim 8; Page 1545; 2745pp; English.
XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX SQ Sequence 19 BP; 3 A; 7 C; 1 G; 8 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1813 GGAGGATAACTTACATG 1830
DB 19 GGAGGAAAGTTCAATG 2
RESULT 195
AAZ69808
ID AAZ69808 standard; DNA; 19 BP.
AC AAZ69808;
XX 10-SEP-2001 (first entry)
DE Human biallelic marker upstream amplification primer SEQ ID NO:4164.
XX Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
XX diagnosis; ss.
XX Homo sapiens.
XX WO9954500-A2.
XX 28-OCT-1999.
XX 21-APR-1999; 99WO-IB000822.
XX 21-APR-1998; 98US-0082614P.
PR 23-NOV-1998; 98US-0109732P.
XX (GEST ) GENSET.
XX Cohen D, Blumenfeld M, Chumakov I;
XX WPI; 2000-013267/01.
XX Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome.
XX Claim 8; Page 1545; 2745pp; English.
XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX SQ Sequence 19 BP; 3 A; 7 C; 1 G; 8 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1813 GGAGGATAACTTACATG 1830
DB 19 GGAGGAAAGTTCAATG 2
RESULT 195
AAZ69808
ID AAZ69808 standard; DNA; 19 BP.
AC AAZ69808;
XX 10-SEP-2001 (first entry)
DE Human biallelic marker upstream amplification primer SEQ ID NO:4164.
XX Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
XX diagnosis; ss.
XX Homo sapiens.
XX WO9954500-A2.
XX 28-OCT-1999.
XX 21-APR-1999; 99WO-IB000822.
XX 21-APR-1998; 98US-0082614P.
PR 23-NOV-1998; 98US-0109732P.
XX (GEST ) GENSET.
XX Cohen D, Blumenfeld M, Chumakov I;
XX WPI; 2000-013267/01.
XX Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome.
XX Claim 8; Page 1119; 2745pp; English.
XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX SQ Sequence 19 BP; 4 A; 3 C; 5 G; 7 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.9e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1921 CCCAGTGTGATTGGA 1938
DB 1 CCCAGTGTGATTGGA 18
RESULT 196
ADE27581/C
ID ADE27581 standard; RNA; 19 BP.
XX ADE27581;
XX 29-JAN-2004 (first entry)
DE Stearoyl-CoA desaturase siNA oligonucleotide SEQ ID NO:525.
XX short interfering nucleic acid; siNA; downregulation; inhibition; SCD;
KW stearoyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
KW antiarteriosclerotic; cytostatic; virucide; obesity; diabetes;
KW atherosclerosis; cancer; viral infection; drug screening;
KW genetic engineering; pharmacogenomic; gene mapping; ss.
XX Synthetic.
XX WO2003070885-A2.
XX 28-AUG-2003.
XX 13-FEB-2003; 2003WO-US004317.
XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 20-SEP-2002; 2002US-0412104P.
PR 15-JAN-2003; 2003US-0440129P.
XX (RIBO-) RIBOZYME PHARM INC.
XX Mcswiggen J, Beigelman L, Thompson J;
XX WPI; 2003-721687/68.
XX
```

PT New short interfering nucleic acid, useful e.g. for treatment and  
PT diagnosis of obesity or diabetes, downregulates expression of the  
PT stearyl-CoA desaturase gene.

XX Example 3; SEQ ID NO 525; 139pp; English.

CC The present invention describes a short interfering nucleic acid (siNA)  
CC that downregulates expression of the SCD (stearyl-CoA desaturase) gene  
CC by RNA interference. Also described: (1) modulating expression of SCD  
CC genes in cells, tissue explants or organisms by introduction of siNA; (2)  
CC kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or  
CC complexes of siNA; and (4) vectors that express siNA. SCD inhibiting  
CC siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and  
CC virucide activities. The siNAs can be used to modulate expression of SCD  
CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;  
CC diabetes (types I and II); atherosclerosis; cancer and viral infections.  
CC They can also be used for drug screening; diagnosis; target  
CC identification and validation; genetic engineering; pharmacogenomics;  
CC studying gene function and gene mapping (e.g. of single-nucleotide  
CC polymorphisms). The present sequence represents an SCD siNA, which is  
CC used in the exemplification of the present invention.

XX Sequence 19 BP; 6 A; 9 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 1.9e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1253 CTCCTTTGGGGGTGTAC 1270

DB 18 CTCCTTTGGGGGTGTGC 1

RESULT 197

ADE27291  
ID ADE27291 standard; RNA; 19 BP.

XX ADE27291;

XX 29-JAN-2004 (first entry)

DE Stearyl-CoA desaturase siNA oligonucleotide SEQ ID NO:235.

XX short interfering nucleic acid; siNA; downregulation; inhibition; SCD;  
KW stearyl-CoA desaturase; RNA interference; anorectic; antidiabetic;  
KW antiarteriosclerotic; cytostatic; virucide; obesity; diabetes;  
KW atherosclerosis; cancer; viral infection; drug screening;  
KW genetic engineering; pharmacogenomic; gene mapping; ss.

XX Synthetic.

OS

WO2003070885-A2.

PN

28-AUG-2003.

XX 13-FEB-2003; 2003WO-US004317.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0409293P.

PR 20-SEP-2002; 2002US-0412304P.

PR 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L, Thompson J;

XX WPI; 2003-721687/68.

PT New short interfering nucleic acid, useful e.g. for treatment and

PT diagnosis of obesity or diabetes, downregulates expression of the  
PT stearyl-CoA desaturase gene.

XX Example 3; SEQ ID NO 235; 139pp; English.

CC The present invention describes a short interfering nucleic acid (siNA)  
CC that downregulates expression of the SCD (stearyl-CoA desaturase) gene  
CC by RNA interference. Also described: (1) modulating expression of SCD  
CC genes in cells, tissue explants or organisms by introduction of siNA; (2)  
CC kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or  
CC complexes of siNA; and (4) vectors that express siNA. SCD inhibiting  
CC siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and  
CC virucide activities. The siNAs can be used to modulate expression of SCD  
CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;  
CC diabetes (types I and II); atherosclerosis; cancer and viral infections.  
CC They can also be used for drug screening; diagnosis; target  
CC identification and validation; genetic engineering; pharmacogenomics;  
CC studying gene function and gene mapping (e.g. of single-nucleotide  
CC polymorphisms). The present sequence represents an SCD siNA, which is  
CC used in the exemplification of the present invention.

XX Sequence 19 BP; 0 A; 4 C; 9 G; 0 T; 6 U; 0 Other;

Query Match 0.7%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 55.6%; Pred. No. 1.9e+02;  
Matches 10; Conservative 6; Mismatches 2; Indels 0; Gaps 0;

QY 1253 CTCCTTTGGGGGTGTAC 1270

DB 2 CUGCUUUGGGGGUGUC 19

RESULT 198

ADE30009/C  
ID ADE30009 standard; RNA; 19 BP.

XX ADE30009;

XX 29-JAN-2004 (first entry)

DE Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:631.

XX short interfering nucleic acid; siNA; downregulation; inhibition;  
KW mitogen-activated protein kinase; MAP kinase; RNA interference;  
KW cytostatic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;  
KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;  
KW antipsoriatic; gastrointestinal; obesity; diabetes; tumour;  
KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;  
KW psoriasis; inflammatory bowel disease; drug screening;  
KW genetic engineering; pharmacogenomic; gene mapping; ss.

OS Synthetic.

XX WO2003072590-A1.

PN

04-SEP-2003.

XX 28-JAN-2003; 2003WO-US002510.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (SIRN-) SIRNA THERAPEUTICS INC.

XX Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;

XX WPI; 2003-689980/65.

PT New short interfering nucleic acid, useful e.g. for treatment and  
PT diagnosis of cancer, downregulates expression of mitogen-activated  
PT protein kinase genes.  
XX  
XX Example 3; SEQ ID NO 631; 164pp; English.  
XX  
XX The present invention describes a short interfering nucleic acid (siNA)  
CC that downregulates expression of a mitogen-activated protein kinase  
CC (MAPK) genes by RNA interference. Also described: (1) a method for  
CC modulating expression of MAPK genes in cells, tissue explants or  
CC organisms by introduction of siNA; (2) kits for in vitro or in vivo  
CC delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)  
CC vectors that express siNA and cells containing these vectors. MAPK siNAs  
CC have cytostatic, anorectic, antidiabetic, antiinflammatory,  
CC antiasthmatic, immunosuppressive, antibacterial, antirheumatic,  
CC antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK  
CC siNAs can be used to modulate the expression of MAPK genes, in cells,  
CC tissue explants or organisms, e.g. for treating obesity; diabetes types I  
CC and II; a wide range of tumours, and inflammatory diseases (asthma,  
CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel  
CC disease). They can also be used for drug screening; diagnosis; target  
CC identification and validation; genetic engineering; pharmacogenomics;  
CC studying gene function and gene mapping (e.g. of single-nucleotide  
CC polymorphisms). The present sequence represents a MAPK siNA which is used  
CC in the exemplification of the present invention.  
XX  
XX Sequence 19 BP; 10 A; 4 C; 2 G; 0 T; 3 U; 0 Other;  
SQ  
Query Match 0.7%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 1.9e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 404 TTGGCAATTGGAATGTTT 421  
Db 18 TTGGCTTTGGAATGTTT 1  
  
RESULT 199  
AD29930  
ID ADE29930 standard; RNA; 19 BP.  
XX  
XX ADE29930;  
XX  
XX 29-JAN-2004 (first entry)  
XX  
XX Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:552.  
XX  
XX short interfering nucleic acid; siNA; downregulation; inhibition;  
KW mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;  
KW cytostatic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;  
KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;  
KW antipsoriatic; gastrointestinal; obesity; diabetes; tumour;  
KW inflammatory diseases; asthma; septic shock; rheumatoid arthritis;  
KW psoriasis; inflammatory bowel disease; drug screening;  
KW genetic engineering; pharmacogenomic; gene mapping; ss.  
XX  
XX Synthetic.  
XX  
XX WO2003072590-A1.  
XX  
XX 04-SEP-2003.  
XX  
XX 28-JAN-2003; 2003WO-US002510.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
XX (SIRN-) SIRNA THERAPEUTICS INC.

XX  
PI Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;  
XX WPI; 2003-689980/65.  
XX  
XX New short interfering nucleic acid, useful e.g. for treatment and  
PT diagnosis of cancer, downregulates expression of mitogen-activated  
PT protein kinase genes.  
XX  
XX Example 3; SEQ ID NO 552; 164pp; English.  
XX  
XX The present invention describes a short interfering nucleic acid (siNA)  
CC that downregulates expression of a mitogen-activated protein kinase  
CC (MAPK) genes by RNA interference. Also described: (1) a method for  
CC modulating expression of MAPK genes in cells, tissue explants or  
CC organisms by introduction of siNA; (2) kits for in vitro or in vivo  
CC delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)  
CC vectors that express siNA and cells containing these vectors. MAPK siNAs  
CC have cytostatic, anorectic, antidiabetic, antiinflammatory,  
CC antiasthmatic, immunosuppressive, antibacterial, antirheumatic,  
CC antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK  
CC siNAs can be used to modulate the expression of MAPK genes, in cells,  
CC tissue explants or organisms, e.g. for treating obesity; diabetes types I  
CC and II; a wide range of tumours, and inflammatory diseases (asthma,  
CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel  
CC disease). They can also be used for drug screening; diagnosis; target  
CC identification and validation; genetic engineering; pharmacogenomics;  
CC studying gene function and gene mapping (e.g. of single-nucleotide  
CC polymorphisms). The present sequence represents a MAPK siNA which is used  
CC in the exemplification of the present invention.  
XX  
XX Sequence 19 BP; 3 A; 2 C; 4 G; 0 T; 10 U; 0 Other;  
SQ  
Query Match 0.7%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 38.9%; Pred. No. 1.9e+02;  
Matches 7; Conservative 9; Mismatches 2; Indels 0; Gaps 0;  
  
QY 404 TTGGCAATTGGAATGTTT 421  
Db 2 UUGGCCUUUGAUGUUU 19  
  
RESULT 200  
ADF92073/C  
ID ADF92073 standard; DNA; 19 BP.  
XX  
XX ADF92073;  
XX  
XX 26-FEB-2004 (first entry)  
XX  
XX Human cytokeatin 18-derived R2 DNA - SEQ ID 161.  
XX  
XX human; cytokeatin; CK; LAMP; loop mediated isothermal amplification;  
KW tumour metastasis; prostate cancer; lymphoma; human; CK18; ss; primer;  
KW PCR; R2; probe.  
XX  
XX Homo sapiens.  
XX  
XX WO2003097878-A1.  
XX  
XX 27-NOV-2003.  
XX  
XX 20-MAY-2003; 2003WO-JP006256.  
XX  
XX 21-MAY-2002; 2002JP-00145689.  
PR 17-JUN-2002; 2002JP-00175271.  
PR 09-JUL-2002; 2002JP-00199759.  
XX  
XX (SYSM-) SYSMEX CORP.  
XX  
XX Tada S, Akai Y, Imura Y, Abe S, Minekawa H;  
PI WPI; 2004-012543/01.  
XX  
XX DR

XX LAMP nucleic acid amplification primers for detection of cytokeratin  
PT expression as indicator in diagnosis of tumour metastasis.  
XX  
XX  
PS Claim 3; SEQ ID NO 161; 266pp; Japanese.  
XX  
CC The invention relates to novel nucleic acid amplification primers for the  
CC detection of human cytokeratin (CK) 18, 19 or 20 expression by the LAMP  
CC (loop mediated isothermal amplification) method. The primers of the  
CC invention may be useful for the detecting cytokeratin 18-20 expression as  
CC an indicator for the diagnosis of tumour metastasis, particularly  
CC prostate cancer and lymphoma. The amplification using the primers is  
CC highly efficient and allows very sensitive detection of tumour  
CC metastasis. The current sequence is that of the human CK18-derived DNA of  
CC the invention.  
XX  
XX Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;  
SQ  
Query Match 0.7%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 1.9e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1705 AAGATGATGTCAGACATC 1722  
Db 19 AAGATCATGCGCAGACATC 2  
RESULT 201  
AD100848/c  
ID AD100848 standard; DNA; 19 BP.  
XX  
AC AD100848;  
XX  
DT 22-APR-2004 (first entry)  
XX  
DE PCR primer SEQ 18 used to amplify fruit fly transglucuronidase sequence.  
XX  
DE transglucuronidase; glucuronyltransferase; GAG; glucosaminoglycan chain;  
KW HNK-1 epitope; glycotecnology; fruit fly; DmGlcAT-I; DmGlcAT-PI;  
KW DmGlcAT-PII; ss; PCR; primer; RT-PCR.  
XX  
OS Drosophila melanogaster.  
XX  
PN WO2004003206-A1.  
XX  
PD 08-JAN-2004.  
XX  
PF 30-JUN-2003; 2003WO-JP008256.  
XX  
PR 01-JUL-2002; 2002JP-00192467.  
XX  
PA (NISC-) JAPAN SCI & TECHNOLOGY CORP.  
XX  
PI Sugahara K, Kitagawa H;  
DR WPI; 2004-083061/08.  
XX  
XX Drosophila melanogaster-originated transglucuronidases and their encoded  
PT genes active in syntheses of GAG chain and HNK-1 epitope, useful as  
PT reagent in their studies and in glycotecnology.  
XX  
XX Example 5; SEQ ID NO 18; 75pp; Japanese.  
PS  
XX The invention relates to a novel gene encoding a transglucuronidase  
CC (glucuronyltransferase) protein. The enzymes of the invention, DmGlcAT-1,  
CC DmGlcAT-PI and DmGlcAT-PII, and their encoded genes participate in the  
CC synthesis of the GAG (glucosaminoglycan) chain and HNK-1 epitope, both of  
CC which are particularly useful as reagents and in glycotecnology. The  
CC current sequence is that of the PCR primer of the invention which was  
CC used to amplify fruit fly transglucuronidase sequence.  
XX  
XX Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 1.9e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 254 GCAGTGTGGCTCAACTTC 271  
Db 19 GCAGTGAGCGTCAGTTC 2  
RESULT 202  
ADQ62378/c  
ID ADQ62378 standard; RNA; 19 BP.  
XX  
AC ADQ62378;  
XX  
DT 09-SEP-2004 (first entry)  
XX  
DE Anti-CLSPN siRNA SEQ ID NO:2080.  
XX  
KW ss; siRNA; Gene silencing; Bcl-2; optimised; short interfering RNA;  
KW RNA interference.  
XX  
OS Synthetic.  
XX  
PN WO2004045543-A2.  
XX  
PD 03-JUN-2004.  
XX  
PF 14-NOV-2003; 2003WO-US036787.  
XX  
PR 14-NOV-2002; 2002US-0426137P.  
PR 10-SEP-2003; 2003US-0502050P.  
XX  
PA (DHAR-) DHARMACON INC.  
XX  
PI Anastasia K, Angela R, Devin L, William M, Stephen S;  
XX  
DR WPI; 2004-420527/39.  
XX  
PT Selecting siRNA by selecting an siRNA molecule of 19-25 nucleoside bases  
PT by selecting a target gene and measuring the functionality of the  
PT nucleotide sequences that are complementary to a stretch of nucleotides  
PT of the target sequence.  
XX  
PS Example 12; SEQ ID NO 2080; 199pp; English.  
XX  
CC The invention relates to a novel method for selecting siRNA (short  
CC interfering RNA) comprising selecting an siRNA molecule of 19-25  
CC nucleoside bases by selecting a target gene and measuring the  
CC functionality of sequences of 19-25 nucleotides in length that are  
CC substantially complementary to a stretch of nucleotides of the target  
CC sequence, where the functionality is dependent upon non-target specific  
CC criteria. Also claimed are methods for gene-silencing, developing an  
CC siRNA algorithm for selecting siRNA, selecting an siRNA with improved  
CC functionality, selecting hyperfunctional siRNA, an siRNA molecule  
CC effective at silencing Bcl-2, and a kit for gene silencing comprising the  
CC siRNA. The siRNA molecule comprises a sequence substantially similar to a  
CC sequence consisting of GGGAGUAGUGAUGAUGA; GAAGUACUCCUUAUAG;  
CC GUACGACACCGGAGUA; AGAUGAGUAGUAGUACAU; UGAGACUCUGUCUAGUU;  
CC CAUGCGCCUCUGUUUGA; UGCGCCUCUGUUUGAUU; GAGAUGAGUAGUAGUACA;  
CC CGAUGAGUAGUAGUAGUAC; and GAAGACUCUGUCUAGUUU.  
CC comprises a sense strand and an anti-sense strand. The siRNA molecule  
CC comprises a hairpin. The siRNA molecule comprises between 18 and 30 base  
CC pairs. The kit comprises at least two siRNA, comprising a first optimised  
CC siRNA and a second optimised siRNA. The method is useful in selecting  
CC siRNA for generating a gene silencing reagent. The present sequence is  
CC used in the exemplification of the invention.  
XX  
SQ Sequence 19 BP; 7 A; 1 C; 6 G; 0 T; 5 U; 0 Other;

Query Match 0.7%; Score 14.8; DB 1; Length 19;  
Best Local Similarity 88.9%; Pred. No. 1.9e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;





```
XX SQ Sequence 19 BP; 0 A; 3 C; 0 G; 0 T; 13 U; 3 Other;
Query Match 0.7%; Score 14.6; DB 1; Length 19;
Best Local Similarity 73.7%; Pred. No. 2e+02;
Matches 14; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY 1650 GGAAAGAAAAAATGAAGA 1668
Db 19 GGAAAAAAGAAAAAGRRRA 1

RESULT 205
AAQ20606/c
ID AAQ20606 standard; DNA; 16 BP.
XX
AC AAQ20606;
XX
XX 24-OCT-2003 (revised)
DT 25-MAR-2003 (revised)
DT 06-MAY-1992 (first entry)
XX
DE Tyrosinase initiation region in pBGC620.3 expression vector.
XX
KW Melanin; melanogenesis; ORF438; ss.
XX
XX Streptomyces antibioticus; IMRU 3720.
OS
XX Key Location/Qualifiers
FH FT RBS 1..4
FT FT /*tag= a
FT FT /label= RBS2
FT FT 14..16
FT FT /*tag= b
FT FT /notes= "Initiation codon"
XX
XX W09200373-A.
XX
XX 09-JAN-1992.
XX
XX 29-JUN-1990; 90US-00545075.
XX
XX 29-JUN-1990; 90US-00545075.
XX
XX 02-NOV-1990; 90US-00607119.
XX
XX (BIOS-) BIOSOURCE GENETICS.
XX
XX Dellaciopa G, Garger SJ, Sverlow GG, Turpen TH, Grill LK;
PI Chedekel MR;
XX
XX WPI; 1992-041555/05.
XX
XX Method for enhanced melanin prodn. - comprises manipulating growth
PT medium, fermentation conditions or host microorganism.
XX
XX Disclosure; Page 11; 89pp; English.
XX
XX The sequence is a portion of expression plasmid pBGC620.3. Plasmid
CC pBGC620.3 was prepd. by ligating a fragment from pU702 (Berman et al)
CC contg. DNA encoding the activator protein ORF438 and the tyrosinase
CC protein from the mel locus of S. antibioticus into plasmid pT7-7 (S.
CC Tabo). NcoI SphI RBS1 ORF438 RBS2 tyrosinase BclI HindIII pBGC620.3 +---
CC +---[ ] +-----[ ] +-----[ ] +-----[ ] +-----[ ] +-----[ ] +-----[ ]
CC RBS2 and the initiation codon of the tyrosinase gene. Plasmid pBGC619
CC which contains the tyrosinase gene but not the ORF438 sequence was also
CC prepd. by ligating a fragment of pMA/mel#3 (M. Kumagai) into pT7-7 (see
CC AAQ20605). Microorganisms transformed with the vectors to express
CC tyrosinase and ORF438 can be used for enhanced prodn. of melanin by
CC fermentation. See also AAQ20605. (Updated on 25-MAR-2003 to correct PI
CC field.) (Updated on 24-OCT-2003 to standardise OS field)
XX
XX Sequence 16 BP; 4 A; 6 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 16;
Best Local Similarity 93.8%; Pred. No. 1.5e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 326 CATGTGCGGCTGCTCC 341
Db 16 CATGTGCGGCTGCTCC 1

RESULT 206
AAX54609
ID AAX54609 standard; DNA; 16 BP.
XX
XX AAX54609;
XX
XX 05-JUL-1999 (first entry)
XX
DE Intercellular adhesion molecule-1 (ICAM-1) antisense oligonucleotide.
XX
XX Antisense oligonucleotide; multiple target; antisense treatment;
KW impaired respiration; inflammation; lung disease;
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW acute asthma; allergy; asthma; impeded respiration;
KW respiratory distress syndrome; pain; cystic fibrosis;
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW prostate cancer; ss.
XX
XX Synthetic.
OS
XX W0913886-A1.
XX
XX 25-MAR-1999.
XX
XX 17-SEP-1998; 98WO-US019419.
XX
XX 17-SEP-1997; 97US-0059160P.
XX
XX 09-JUN-1998; 98US-00039972.
XX
XX (UYEC-) UNIV EAST CAROLINA.
XX
XX Nyce JW;
XX
XX WPI; 1999-229400/19.
XX
XX New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT vasoconstriction.
XX
XX Disclosure; Page 46; 120pp; English.
XX
XX The specification describes antisense oligonucleotides (AAX52869-X55271)
CC directed against at least 2 mRNAs selected from target genes, coding and
CC non-coding regions of RNAs corresponding to target genes, gene initiation
CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
CC end and the juxta-section between coding and non-coding regions and all
CC segments of RNAs encoding proteins associated with one or more diseases,
CC conditions or mixtures. The antisense oligonucleotides may be derived
CC from sequences AAX5272-74. These multiple target oligonucleotides
CC (specifically AAX55180-271) can be used for the antisense treatment of
CC diseases and conditions. Typical diseases and conditions are those
CC associated with impaired respiration and inflammation, including lung
CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC acute asthma, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC well as all types of cancers which may metastasize or have metastasized
XX to the lungs, including breast and prostate cancer
```

SQ Sequence 16 BP; 0 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.4; DB 1; Length 16;  
 Best Local Similarity 93.8%; Pred. No. 1.5e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1411 TGTCTCGCGCGTCCC 1426  
 |||||  
 1 TGTCTCTCGCGCGTCCC 16

Db

RESULT 207  
 AAA34056  
 ID AAA34056 standard; DNA; 16 BP.  
 XX  
 AC AAA34056;  
 XX  
 DT 28-JUL-2000 (first entry)  
 XX  
 DE Human adenosine receptor related polynucleotide SEQ ID NO:1745.  
 XX  
 KW Human; adenosine receptor; low adenosine antisense oligonucleotide;  
 KW phosphorothioate; impaired respiration; inflammation; allergy;  
 KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;  
 KW antiallergic; antiasthmatic; cytosstatic; analgesic; impaired airway;  
 KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;  
 KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;  
 KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;  
 KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200009525-A2.  
 PN  
 XX  
 PD 24-FEB-2000.  
 XX  
 PF 03-AUG-1999; 99WO-US017712.  
 XX  
 XX 03-AUG-1998; 98US-0095212P.  
 PR  
 XX  
 PA (UYEC-) UNIV EAST CAROLINA.  
 XX  
 XX Nyce JW;  
 PI  
 XX  
 DR WPI; 2000-205971/18.  
 XX  
 XX New antisense oligonucleotides useful for treating e.g. pulmonary  
 PT vasoconstriction, inflammation, allergies, asthma, hypertension,  
 PT bronchitis, emphysema, respiratory distress syndrome, ischemia or  
 PT cancers.  
 XX  
 PS Disclosure; Page 482; 1343pp; English.  
 XX  
 CC The present invention describes a new composition comprising an antisense  
 CC oligonucleotide (ON) with low adenosine (up to 15%), which targets  
 CC nucleic acids involved in bronchoconstriction, allergies, and/or  
 CC inflammation. The ON can have antiinflammatory, antiallergic,  
 CC antiasthmatic, cytosstatic and analgesic activities. The compositions are  
 CC useful for the treatment of diseases associated with inflammation,  
 CC impaired airways, including lung disease and diseases whose secondary  
 CC effects afflict the lungs of a subject. They can be used for treating  
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,  
 CC impaired respiration, respiratory distress syndrome, pain, cystic  
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive  
 CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,  
 CC carcinomas, and cancers which may metastasise to the lungs, including  
 CC breast and prostate cancer. The reduction of the adenosine content of the  
 CC ONs reduces side effects. The A-containing ONs break down with the  
 CC release of deoxyadenosine which activates adenosine receptors causing  
 CC bronchoconstriction and inflammation. AAA32313 to AAA3512 represent the  
 CC nucleotide sequences given in the sequence listing from the present  
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185  
 CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ

CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to  
 CC AAA3992) are specifically claimed ONs from the present invention. N.B.  
 CC Sequences given in the disclosure of the present invention do not match  
 CC up with their corresponding SEQ ID NO: sequences given in the sequence  
 CC listing  
 XX  
 SQ Sequence 16 BP; 0 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.4; DB 1; Length 16;  
 Best Local Similarity 93.8%; Pred. No. 1.5e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1411 TGTCTCGCGCGTCCC 1426  
 |||||  
 1 TGTCTCTCGCGCGTCCC 16

Db

RESULT 208  
 AAP20178  
 ID AAP20178 standard; DNA; 16 BP.  
 XX  
 XX AAP20178;  
 XX  
 DT 14-MAR-2001 (first entry)  
 XX  
 DE Human ICAM-1 polynucleotide fragment #1745.  
 XX  
 KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;  
 KW human; airway disorder; bronchoconstriction; lung inflammation;  
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;  
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytosstatic;  
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;  
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;  
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;  
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;  
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;  
 KW cancer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200062736-A2.  
 PN  
 XX  
 PD 26-OCT-2000.  
 XX  
 XX 24-MAR-2000; 2000WO-US008020.  
 PF  
 XX  
 PR 06-APR-1999; 99US-0127958P.  
 XX  
 XX (UYEC-) UNIV EAST CAROLINA.  
 PA  
 XX (NYCE/) NYCE J W.  
 XX  
 XX Nyce JW;  
 PI  
 XX  
 DR WPI; 2000-679539/66.  
 XX  
 XX Low adenosine (A) content antisense oligonucleotides which do not trigger  
 PT adenosine receptors during metabolism, useful e.g. for treating cancers  
 PT and respiratory obstructions.  
 XX  
 PS Claim 14; Page 145; 1592pp; English.  
 XX  
 CC The present invention describes low adenosine (A) content antisense  
 CC oligonucleotides and compositions (I) comprising them. In the antisense  
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.  
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,  
 CC immunosuppressive, antiasthmatic, hypotensive and cytosstatic activities.  
 CC The antisense oligonucleotides and (I) can be used to down-regulate the  
 CC expression and or activity of target polypeptides associated with the  
 CC lung/respiratory disorders and malignancies, such as stimulating and  
 CC activating peptide factors and transmitters, transcription factors,  
 CC immunoglobulins and antibodies, antibody receptors, cytokines and  
 CC chemokines, endogenously produced specific and non-specific enzymes,  
 CC binding proteins, adhesion molecules and their receptors, cytokine and

CC chemokine receptors, adenosine receptors, bradykinin receptors, central  
 CC nervous system (CNS) and peripheral nervous and non-nervous system  
 CC receptors, CNS and peripheral nervous and non-nervous system peptide  
 CC transmitters, defensins, growth factors, vasoactive peptides and  
 CC receptors, binding proteins and malignancy associated proteins. The  
 CC antisense oligonucleotides may be used in this way to treat disorders  
 CC including respiratory obstruction (especially pulmonary obstruction  
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or  
 CC surfactant hypoproduction which are associated with a disease or  
 CC condition selected from pulmonary vasoconstriction, inflammation,  
 CC allergies, asthma, impeded respiration, respiratory distress syndrome  
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary  
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),  
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,  
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide  
 CC fragments and antisense oligonucleotides used in the exemplification of  
 CC the present invention  
 XX  
 SQ Sequence 16 BP; 0 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 16;  
 Best Local Similarity 93.8%; Pred. No. 1.5e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1411 TGTCTCCGGCGTCCC 1426  
 |||||  
 Db 1 TGTCTCCGGCGTCCC 16

RESULT 209  
 AAS56860  
 ID AAS56860 standard; DNA; 16 BP.  
 XX  
 AC AAS56860;

DT 16-JAN-2002 (first entry)  
 XX  
 DE Validation ribozyme DNA sequence #34.

XX Human; BRCA-1 regulator; ribozyme; BR1; RNA target recognition; probe;  
 KW cytosolic; RNA cleavage; tumour suppressor; PCR primer; CHLR2; AF6; BR2;  
 KW inhibitor dominant negative 4; breast basic conserved protein 1; BBC1;  
 KW BR3; ID4; cancer; proliferative disorder; tumour proliferation; ss.  
 XX  
 OS Homo sapiens.

XX  
 FN WO200170982-A2.  
 XX  
 PD 27-SEP-2001.

XX 23-MAR-2001; 2001WO-US009559.  
 XX  
 PR 23-MAR-2000; 2000US-00536058.

PA (IMMU-) IMMUSOL INC.  
 PA (BEGE/) BEGER C.  
 XX  
 XX Beger C, Barber J, Wong-Staal F;

PI WPI; 2001-611503/70.  
 XX  
 DR

PT Novel polypeptides that are the regulators of BRCA-1, useful for treating  
 PT cancer and diagnosing the presence of neoplastic cells in biological  
 PT sample.  
 PT  
 XX

PS Disclosure; Fig 8; 97pp; English.

XX Sequences AAS56729-AAS56968 represent DNA encoding BRCA-1 regulators,  
 CC ribozyme target recognition RNA sequences, DNA fragments encoding the RNA  
 CC and primers used in the methods of the invention. Hybridisation of  
 CC ribozymes to their targets results in cleavage of the RNA target. The  
 CC ribozymes can be used to cleave regulators of the tumour suppressor BRCA-  
 CC 1, resulting in upregulation or downregulation of BRCA-1 in a cell. The

CC mRNA targets include those encoding the BRCA-1 regulator BR1, inhibitor  
 CC dominant negative 4 (ID4), breast basic conserved protein 1 (BBC1),  
 CC CHLR2, AF6, BR2 and BR3. Regulation of BRCA-1 is useful for treating and  
 CC diagnosing cancer and other proliferative disorders. The severity of an  
 CC incidence of cancer can be lessened by regulating tumour proliferation  
 CC through modulation of BRCA-1 expression. The sequences of the invention  
 CC are useful in the development of anti-cancer drugs  
 XX  
 SQ Sequence 16 BP; 6 A; 5 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 16;  
 Best Local Similarity 93.8%; Pred. No. 1.5e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1626 AACCAAGTCCAGAGGCA 1641  
 |||||  
 Db 1 AACCAAGTCCAGAGGCA 16

RESULT 210  
 ABZ58625/c  
 ID ABZ58625 standard; DNA; 16 BP.  
 XX  
 AC ABZ58625;

XX 14-APR-2003 (first entry)  
 DT  
 XX  
 DE Cytochrome P450 (CYP450) cDNA probe specific primer.

XX CYP450; cytochrome P450; isoform; primer; PCR; ss.  
 KW  
 OS Homo sapiens.

XX WO2002101031-A1.  
 PN  
 PD 19-DEC-2002.

PF 11-JUN-2001; 2001WO-EP007056.  
 XX  
 PR 11-JUN-2001; 2001WO-EP007056.

XX (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.  
 PA

PI De Waziers I, Couteau C, Gros C, Moncion A, Beaune P;  
 XX WPI; 2003-175177/17.

PT New polynucleotide, useful for detecting Cytochromes P450 (CYP450)  
 PT isoforms and for evaluating the toxicity or pathogenicity of a product  
 PT and predicting drug in vivo interactions or efficiency.  
 XX

PS Claim 2; Fig 2; 52pp; English.

XX The invention relates to a set of new cDNA probes which enables the  
 CC specific and simultaneous detection of the main fourteen CYP450  
 CC (cytochrome P450) isoforms and to new primers specific for the probes.  
 CC The probes and primers are useful for detecting CYP450 isoforms and for  
 CC evaluating the toxicity or pathogenicity of a product and predicting drug  
 CC in vivo interactions or efficiency. Sequences ABZ58615-642 represent  
 CC specific examples of the primers specific for the CYP450 cDNA probes  
 XX

SQ Sequence 16 BP; 5 A; 5 C; 3 G; 3 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.4; DB 1; Length 16;  
 Best Local Similarity 93.8%; Pred. No. 1.5e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1897 GATGGCTGGCATTTCT 1912  
 |||||  
 Db 16 GATGGCTGGCATTTCT 1

RESULT 211

ABZ95872  
ID ABZ95872 standard; DNA; 16 BP.  
XX AC ABZ95872;  
XX DT 17-OCT-2003 (first entry)  
XX DE Human ICAM-1 antisense fragment no.1732.  
XX  
XX Human; antisense; lung dysfunction; nasal airway dysfunction;  
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;  
XX antiasthmatic; hypotensive; immunosuppressive; cytosolic; gene therapy;  
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;  
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
XX lung inflammation; respiratory disease; ds.  
XX OS Homo sapiens.  
XX PN WO200285308-A2.  
XX PD 31-OCT-2002.  
XX PF 23-APR-2002; 2002WO-US013135.  
XX PR 24-APR-2001; 2001US-0286137P.  
XX PA (SPIG-) EPIGENESIS PHARM INC.  
XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
XX PI Miller S, Tang L, Shahabuddin S;  
XX DR WPI; 2003-229219/22.  
XX  
XX Pharmaceutical composition for treating ailments associated with impaired  
XX PT respiration, has oligo(s) antisense to specific gene(s) or its  
XX PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
XX PT ubiquinone.  
XX PS Disclosure; SEQ ID NO 11114; 872pp; English.  
XX  
XX The invention relates to a novel pharmaceutical composition, which has a  
XX first active agent comprising an oligonucleotide antisense to the  
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,  
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
XX junctions of genes encoding a polypeptide associated with lung and/or  
XX nasal airway dysfunction and a second active agent comprising an  
XX antiinflammatory steroid and ubiquinone. A composition of the invention  
XX has antiinflammatory, antiallergic, antiasthmatic, hypotensive,  
XX immunosuppressive, and cytosolic activity. The composition may have a  
XX use in antisense gene therapy. The composition is useful for treating or  
XX preventing a respiratory, lung or malignant disease or condition, also  
XX for enhancing the prophylactic or therapeutic respiratory effect of an  
XX antiinflammatory steroid in a subject, for reducing or depleting levels  
XX of, or reducing sensitivity to adenosine, reducing levels of adenosine  
XX receptor, producing bronchodilation, increasing levels of ubiquinone or  
XX lung surfactant in a subject's tissue, or treating bronchoconstriction,  
XX lung inflammation, lung allergies, or a respiratory disease or condition.  
XX Note: The sequence data for this patent is not represented in the printed  
XX specification, but was obtained in electronic format directly from WIPO  
XX at ftp.wipo.int/pub/published\_pt\_sequences  
SQ Sequence 16 BP; 0 A; 8 C; 4 G; 4 T; 0 U; 0 Other;  
Query Match 0.7%; Score 14.4; DB 1; Length 16;  
Best Local Similarity 93.8%; Pred. No. 1.5e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1411 TGTGCTCCGCGCTCC 1426  
Db 1 TGTGCTCCGCGCTCC 16  
RESULT 212

ABD19138  
ID ABD19138 standard; DNA; 16 BP.  
XX AC ABD19138;  
XX DT 25-JUL-2004 (first entry)  
XX DE Human ICAM-1 DNA fragment 1732.  
XX  
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
XX surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;  
XX analgesic; hypotensive; immunosuppressive; cytosolic; cystic fibrosis;  
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
XX pulmonary transplantation rejection; ds.  
XX OS Homo sapiens.  
XX PN WO200285309-A2.  
XX PD 31-OCT-2002.  
XX PF 23-APR-2002; 2002WO-US013143.  
XX PR 24-APR-2001; 2001US-0286036P.  
XX PA (SPIG-) EPIGENESIS PHARM INC.  
XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
XX PI Miller S, Tang L, Shahabuddin S;  
XX DR WPI; 2003-093058/08.  
XX  
XX Pharmaceutical composition for treating asthma, has antisense  
XX PT oligonucleotide containing less percentage of adenosine, targeted to  
XX PT nucleic acids associated with lung airway or lung dysfunction, and  
XX PT bronchodilating agent.  
XX PS Claim 15; SEQ ID NO 11114; 763pp; English.  
XX  
XX This invention describes a novel composition (a) a first active agent,  
XX comprising oligonucleotides, effective for alleviating  
XX bronchoconstriction, respiratory tract inflammation, allergies and  
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
XX surfactant depletion or hyposecretion, when administered to a mammal. The  
XX oligonucleotides are derived from a gene encoding or regulating  
XX expression of a target polypeptide associated with lung airway or lung  
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
XX The invention also describes a kit, that comprises: (a) a delivery  
XX device, in separate containers, (b) the oligonucleotides, (c)  
XX instructions for adding a carrier and for use of the kit. The composition  
XX of the invention has antiallergic, antiinflammatory, antiasthmatic, is a  
XX analgesic, hypotensive, immunosuppressive and cytosolic activity, is a  
XX beta-adrenergic agonist. The composition is useful for preventing or  
XX treating a respiratory, lung or malignant disease. The administered  
XX composition comprises oligo and is administered to reduce the production  
XX or availability, or to increase the degradation of the target mRNA or to  
XX reduce the amount of target polypeptide present in the lungs. The  
XX pulmonary obstruction, and/or bronchoconstriction and/or lung  
XX inflammation, allergies and/or surfactant hypoproduction are associated  
XX with a disease or condition such as pulmonary vasoconstriction,  
XX inflammation, allergies, asthma, impeded respiration, respiratory  
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
XX hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
XX transplantation rejection, pulmonary infections, bronchitis or cancer.  
XX The reduced adenosine content of the anti-sense oligos corresponding to  
XX thymidines present in the target RNA serves to prevent the breakdown of  
XX the oligonucleotides into products that free adenosine into the system  
XX e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to  
XX prevent any unwanted effects due to it  
XX

```
SQ Sequence 16 BP; 0 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.4; DB 1; Length 16;
Best Local Similarity 93.8%; Pred. No. 1.5e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1411 TGTGTCGCGCGGTCC 1426
DB 1 TGTCTCTCGCGGTCC 16

RESULT 213
AA68724
ID AAX68724 standard; RNA; 17 BP.
XX
AC AAX68724;
XX
XX
DT 28-JUL-1999 (first entry)
XX
XX Human flt1 VEGF receptor hammerhead ribozyme substrate #19.
XX
XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
XX Homo sapiens.
OS
XX WO9715662-A2.
PN
XX 01-MAY-1997.
PD
XX 25-OCT-1996; 96WO-US017480.
PF
XX 26-OCT-1995; 95US-0005374P.
PR 11-JAN-1996; 96US-00584040.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (CHIR) CHIRON CORP.
XX
XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
PI WPI; 1997-259017/23.
XX
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
XX
XX Claim 4; Page 47; 218pp; English.
XX
XX The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
XX Sequence 17 BP; 2 A; 6 C; 5 G; 0 T; 4 U; 0 Other;
Query Match 0.7%; Score 14.4; DB 1; Length 17;
Best Local Similarity 75.0%; Pred. No. 1.7e+02;
Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
QY 1223 GTGCGCTCACTATGG 1238
DB 1 GUCGCGCUCACCAUGG 16

SQ Sequence 17 BP; 3 A; 1 C; 7 G; 6 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 613 CAGTGCAGTGTGTGT 628
DB 1 CAGTGCAGTGTGTGTGT 16

RESULT 215
AAA36194/C
ID AAA36194 standard; DNA; 17 BP.
XX
AC AAA36194;
XX
XX 26-JUL-2000 (first entry)
DT
XX Human genomic SNP allele specific oligonucleotide SEQ ID NO:251.
DE
```



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XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
XX
XX WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 8128; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
XX Sequence 17 BP; 3 A; 6 C; 1 G; 0 T; 7 U; 0 Other;
SQ
Query Match 0.7%; Score 14.4; DB 1; Length 17;
Best Local Similarity 56.2%; Pred. No. 1.7e+02;
Matches 9; Conservative 6; Mismatches 1; Indels 0; Gaps 0;

QY 850 CCAACTTTCTCTGGA 865
DB 1 CCACUUCUUCUGCA 16
|||||:|:|:|:|:|

RESULT 218
ACN06714/C
ID ACN06714 standard; RNA; 17 BP.
XX
XX ACN06714;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV Amberzyme substrate SEQ ID NO 6717.
DE
DE WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
KW Amberzyme; Zinzyme; ss.
XX
XX West Nile Virus.
OS
XX WO200268637-A2.
PN
XX 06-SEP-2002.
PD
XX 19-OCT-2001; 2001WO-US048350.
PF
XX 20-OCT-2000; 2000US-0242411P.
PR
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
PI
XX WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 8127; 495pp; English.

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DR WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 6717; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
XX Sequence 17 BP; 7 A; 1 C; 6 G; 0 T; 3 U; 0 Other;
SQ
Query Match 0.7%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 850 CCAACTTTCTCTGGA 865
DB 17 CCAACTTTCTCTGCA 2
|||||:|:|:|:|:|

RESULT 219
ACN08124
ID ACN08124 standard; RNA; 17 BP.
XX
XX ACN08124;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV minus strand Hammerhead Ribozyme substrate SEQ ID NO 8127.
DE
DE WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
KW Amberzyme; Zinzyme; ss.
XX
XX West Nile Virus.
OS
XX WO200268637-A2.
PN
XX 06-SEP-2002.
PD
XX 19-OCT-2001; 2001WO-US048350.
PF
XX 20-OCT-2000; 2000US-0242411P.
PR
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
PI
XX WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 8127; 495pp; English.

```



CC	bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC	shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC	ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC	ribozymes of the invention
XX	
SQ	Sequence 17 BP; 3 A; 3 C; 8 G; 0 T; 3 U; 0 Other;
Query Match	0.7%; Score 14.4; DB 1; Length 17;
Best Local Similarity	75.0%; Pred. NO. 1.7e+02;
Matches	12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
Qy	607 ACTGGCGCAGTGGAGTG 622
	: : :
Db	1 ACUGGGCAGUGGACUG 16
RESULT	221

ADE25232/C  
ID ADE25232 standard; DNA; 17 BP.  
XX  
AC ADE25232;

DT	29-JAN-2004 (first entry)
XX	
DE	Plant growth associated polynucleotide seg id 207.

plant growth; plant growth trait modification; brassicaceae; brassicopsids  
 KW Brassica; Zea; Oryza; Trilicium; Hordeum; Lolium; Sorghum; Glycine;  
 KW Medicago; Helianthus; Lactuca; Beta; Vitis; Solanum; Lycopersicon;  
 KW Capsicum; Gossypium; Hevea; Linum; Prunus; Citrus; Pinus;  
 KW Quercus; ss.  
 XX  
 XX  
 XX  
 OS Magnoliophyta.  
 XX  
 XX  
 PN US2003188343-A1.  
 XX

02-JAN-2003;  
07-JAN-2003; 2003US-00338777.  
09-JAN-2002; 2002US-0347288P.

FA (LINK-) LINK THEORETICS INC.  
XX

XX  
T3  
WISDOM  
ATTENTION  
REVENUE

XX  
XX  
XX/CC000-0007, 1734

PT growth trait in a flowering pl

**F1**      **Olyza.**

[illegible]

PI McSwiggan J;

DR WPI; 2003-140484/13.

CC C2; and (d) encoded by a sequence 70 % identical to S2. The expression or  
CC activity of (I) is modulated to modulate a plant growth trait in a  
CC flowering plant, of the family Brassicaceae, preferably in a plant that

PS Claim 4; Page 140; 185pp; English.

**CC** Pinosus, Pinus, Cupressaceae; needle, stem, branch, etc.; adult;  
**CC** Pinosus, Pinus, Cupressaceae; seedling;  
**CC** growth trait. This sequence represents a polynucleotide isolated from the  
 CC plant growth associated genes of the invention that can be used as a  
 CC primer, probe or genetic marker.  
**XX**  
**SQ** Sequence 17 BP; 6 A; 5 C; 5 G; 1 T; 0 U; 0 Other;

	Query Match	Score	DB 1;	Length
	0.7%	14.4	17;	

Query Match 0.7%; Score 14.4; DB 1; Length 17;

```
Best Local Similarity 93.8%; Pred. No. 1.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 772 CCTGGCTGCGTGTAT 787
Db 17 CCTGGCTGCGTGTAT 2

RESULT 222
ADH79315
ID ADH79315 standard; DNA; 17 BP.
XX AC
XX ADH79315;
XX 22-APR-2004 (first entry)
XX DT
XX DE Ring-necked pheasant probe SEQ ID NO:120.
XX KW RNA T7 polymerase; probe; array; ss; probe; ring-necked pheasant.
XX OS Phasianus colchicus.
XX XX
XX FN FR2834521-A1.
XX PD 11-JUL-2003.
XX XX
XX PF 10-JAN-2002; 2002FR-00000265.
XX XX
XX PR 10-JAN-2002; 2002FR-00000265.
XX XX
XX PA (INMR ) BIO MERIEUX.
XX XX
XX PI Mabilat C, Desvarenne S, Babola O, Lacroix B;
XX WPI; 2003-571829/54.
XX DR
XX PT Determining origin of an animal sample, useful e.g. for detecting
XX PT adulteration of food, by testing hybridization of sample DNA with set of
XX PT species-specific reagents.
XX XX
XX PS Claim 1; SEQ ID NO 120; 98pp; French.
XX CC
XX CC The invention relates to a novel method for determining the animal
XX CC species that is the origin of a sample. The method is very general, quick
XX CC and easy to do. It can detect material from a species even when present
XX CC in small amounts in presence of materials from several other species, and
XX CC the species being tested do not have to be known a priori. DNA was
XX CC isolated from an animal sample and amplified by PCR using two primers.
XX CC The amplicon, containing a promoter for RNA T7 polymerase (present in one
XX CC of the primers) was transcribed with incorporation of a fluorescent
XX CC ribonucleotide, then transcripts cleaved to fragments of 20 nucleotides.
XX CC These were tested for hybridisation to a DNA chip carrying 17-mer capture
XX CC probes, specific for different animal species. The present sequence
XX CC represents a probe of the invention.
XX XX
XX SQ Sequence 17 BP; 5 A; 5 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1009 AACAAATGGAGTCGTCC 1024
Db 2 AACACTGGAGTCGTCC 17

RESULT 223
ADK13236/c
ID ADK13236 standard; DNA; 17 BP.
XX AC
XX ADK13236;
XX XX
XX DT 20-MAY-2004 (first entry)

Human glioma endothelial marker (GEM) long tag SEQ ID NO:414.
glioma; brain tissue; neoplastic; glioma endothelial marker; GEM;
anticancer; antiglioma; immune response; cytostatic;
multi-drug sensitive glioma; human; long tag; ss.

Homo sapiens.
Synthetic.
WO20040416758-A2.
26-FEB-2004.
15-AUG-2003; 2003WO-US025614.
15-AUG-2002; 2002US-0403390P.
01-APR-2003; 2003US-0458978P.
(GENZ ) GENZYME CORP.
(UYJO ) UNIV JOHNS HOPKINS.
Madden SI, Wang CJ, Cook BP, Lattera J, Walter K;
WPI; 2004-247973/23.
Diagnosing glioma by detecting expression product of any one of 255
genes, glioma endothelial markers, in brain tissue sample suspected of
being neoplastic, and comparing the expression with expression in normal
brain tissue sample.
Example 2; SEQ ID NO 414; 114pp; English.

The present invention describes a method (M1) for aiding in the diagnosis
of glioma. (M1) involves detecting an expression product of at least one
gene (I) in a first brain tissue sample (T) suspected of being
neoplastic, where (I) is chosen from any one of 255 genes (glioma
endothelial markers (GEMs)) as given in specification, and comparing the
expression of (I) in (T) with expression of (I) in a second normal brain
tissue sample (R), where increased expression of (I) in (T) relative to
(R), identifies (T) as likely to be neoplastic. Also described: (1)
treating (M2) glioma involves contacting cells of the glioma with an
antibody that specifically binds to a extracellular epitope; (2)
identifying (M3) a test compound as potential anticancer or antiglioma
drug involves contacting a test compound with the cell which expresses
(I), monitoring an expression product of the at least one gene and
identifying test compound as a potential anticancer drug if it decreases
the expression of at least one gene; (3) identifying (M4) a test compound
as potential anticancer or antiglioma drug involves contacting a test
compound with the cell which expresses mRNA of at least one gene
identified by a tag as described above, monitoring mRNA of the gene, and
identifying the test compound as a potential anticancer drug if it
decreases the expression of at least one gene; and (4) inducing (M5) an
immune response to glioma involves administering to a mammal, a protein
or (I). (I) have cytostatic activities, and can be used to trigger immune
destruction of glioma cells, and as immune response inducers. (M1) is
useful for aiding in diagnosing glioma. (M2) is useful for treating multi-
drug sensitive glioma in a human. (M5) is useful for inducing an immune
response to a glioma in a mammal having glioma or in a mammal who has had
a glioma surgically removed. The present sequence represents a human GEM
long tag oligonucleotide, which is used in the exemplification of the
present invention.

Sequence 17 BP; 3 A; 8 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1781 AGGCGCTGGGACTTGC 1796
Db 17 AGGCGCTGGGCTTGC 2
```

RESULT 224  
AAV02505/c  
ID AAV02505 standard; DNA; 18 BP.  
XX  
XX  
AC AAV02505;  
XX  
XX  
DT 04-AUG-1998 (first entry)  
XX  
XX  
DE Transcriptional activator fragment LS5.  
XX  
DE Activating sequence; Gal4; transcriptional activator; RNA polymerase;  
KW Protein-protein interaction; gene therapy; therapeutic; holoenzyme;  
KW Gallii; DNA binding domain; ss.  
XX  
XX  
OS Synthetic.  
XX  
XX  
PN WO9744447-A2.  
XX  
XX  
PD 27-NOV-1997.  
XX  
XX  
PF 02-MAY-1997; 97WO-US007338.  
XX  
XX  
PR 03-MAY-1996; 96US-0017016P.  
XX  
PR 01-MAY-1997; 97US-00017016.  
XX  
XX  
PA (HARD ) HARVARD COLLEGE.  
XX  
XX  
PI Ptashne M, Lu X, Wu Y;  
XX  
XX  
DR WPI; 1998-018502/02.  
DR P-PSDB; AAW31415.  
XX  
XX  
PT New transcriptional activator containing DNA binding domain bound to  
PT peptide - useful for controlling gene expression, especially in gene  
PT therapy, and in protein-protein interaction assays, does not inhibit  
PT other transcriptional activators.  
XX  
XX  
PS Example 1; Page 22; 55pp; English.  
XX  
XX  
CC AAV02501-V02522, AAV02524-V02584, AAV02586-V02592 and AAV02594-V02616 are  
CC DNA fragments used in an assay to determine novel transcriptional  
CC activators. The method involves the production of transcriptional  
CC activators comprising of a DNA-binding group and a 6-25 amino acid  
CC peptide that is covalently bonded to the DNA binding group and does not  
CC represent a fragment of a natural transcription activator. Protein-  
CC protein interactions are identified in the assay by fusing a DNA-binding  
CC domain to a library of DNA fragments and introducing this and a fusion of  
CC target protein and a polypeptide containing a region of Gal4 which  
CC interacts with GalII into a cell containing GalII and identifying  
CC members of the library that interact with the target from activation of  
CC transcription. Such constructs are used to activate transcription in a  
CC cell, e.g. for controlling gene activity, particularly in gene therapy  
CC (e.g. recognizing a site close to a selected therapeutic gene).  
CC Transcription can be activated without blocking other transcriptional  
CC activators. They probably act by interacting with a component of the RNA  
CC polymerase II holoenzyme, GalII, the strongest known yeast activator,  
CC which provides a more sensitive assay allowing detection of even weak  
CC protein-protein interactions. Such activators do not create toxicity  
CC problems even when overexpressed  
XX  
XX  
SQ Sequence 18 BP; 1 A; 10 C; 2 G; 5 T; 0 U; 0 Other;  
Query Match 0.7%; Score 14.4; DB 1; Length 18;  
Best Local Similarity 93.8%; Pred. No. 1.9e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1562 GAAGGGGGATGGCCAG 1577  
|||||  
Db 18 GAAGGGGGAGGGCCAG 3  
|||||

RESULT 225

AAZ41159  
ID AAZ41159 standard; DNA; 18 BP.  
XX  
XX  
AC AAZ41159;  
XX  
XX  
DT 26-JAN-2000 (first entry)  
XX  
XX  
DE Human G-alpha-11 phosphorothioate antisense oligonucleotide #63.  
XX  
XX  
KW Identification; genetic target; gene modulation; human; probe;  
KW antisense oligonucleotide; phosphorothioate; PCR primer;  
KW nucleotide sequence-based technology; antisense drug discovery;  
KW target validation; ss.  
XX  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
XX  
PN WO9953101-A1.  
XX  
XX  
PD 21-OCT-1999.  
XX  
XX  
PF 13-APR-1999; 99WO-US008268.  
XX  
XX  
PR 13-APR-1998; 98US-0081483P.  
XX  
PR 28-APR-1998; 98US-00067638.  
XX  
XX  
PA (ISIS-) ISIS PHARM INC.  
XX  
XX  
PI Cowseert LM, Baker BF, Mcneil J, Freier SM, Sasmor HM, Brooks DG;  
PI Ohasi C, Wyatt JR, Borchers AH, Vickers TA;  
XX  
XX  
DR WPI; 1999-620446/53.  
XX  
XX  
PT Identifying compounds which modulate expression of nucleic acids, used to  
PT provide compounds having defined physical, chemical or bioactive  
PT properties, e.g. antisense activity.  
XX  
XX  
PS Example 27; Page 109; 264pp; English.  
XX  
XX  
CC A method has been developed of defining a set of compounds that modulate  
CC the expression of a target nucleic acid (tNA) sequence via binding of the  
CC compounds with the tNA sequence. The method comprises generating a  
CC library of virtual compounds in silico according to defined criteria, and  
CC evaluating in silico the binding of the virtual compounds with the tNA  
CC according to defined criteria. Also described are: (1) a method of  
CC defining a set of oligonucleotides (ONs) that modulate the expression of  
CC a tNA sequence via binding of the ONs with the tNA sequence comprising  
CC generating a library of virtual compounds in silico according to defined  
CC criteria, and evaluating in silico the binding of the virtual ONs with  
CC the tNA according to defined criteria; and (2) a method of defining a set  
CC of compounds that modulate the expression of a tNA sequence via binding  
CC of the compounds with the tNA. The methods can be used for the generation  
CC and identification of synthetic compounds having defined physical,  
CC chemical or bioactive properties. Information gathered from assays of  
CC such compounds is used to identify nucleic acid sequences that are  
CC tractable to a variety of nucleotide sequence-based technologies, e.g.  
CC antisense drug discovery and target validation. AAZ40852 to AAZ41220, and  
CC AAY52701 to AAY52706, represent sequences used in the exemplification of  
CC the present invention  
XX  
XX  
SQ Sequence 18 BP; 1 A; 7 C; 4 G; 6 T; 0 U; 0 Other;  
Query Match 0.7%; Score 14.4; DB 1; Length 18;  
Best Local Similarity 93.8%; Pred. No. 1.9e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 5 GCGTTTGCTGCTCTCC 20  
|||||  
Db 3 GCGTTTGCTGCTCTCC 18  
|||||

RESULT 226  
AAZ19530



PT corresponding wild type gene.

XX Disclosure; Page 38; 409pp; English.

XX The invention relates to a method for identifying a molecule involved in

CC lipid regulation comprising identifying a molecule that binds to or

CC inhibits binding of a molecule to high bone mass (HBM) or its wild type

CC gene, Zmax1. Compounds identified by the method are useful for treating,

CC diagnosing, preventing or screening for normal and abnormal lipid-

CC associated conditions, including arteriosclerosis, cardiovascular

CC disease, stroke, and osteoporosis. The compounds may also be used in

CC treatment or prevention of diabetic atherosclerosis, neurovascular

CC conditions caused by plaque build-up, poor circulation due to plaque

CC build-up and associated poor wound healing. The methods may be used in

CC gene therapy, pharmaceutical development, and diagnostic assays for bone

CC development disorders. Molecules identified by comparison of Zmax1 and

CC HBM systems can be used as surrogate markers in pharmaceutical

CC development, in diagnosis of human or animal bone disease, and in the

CC treatment of bone diseases. Sequences ABK22776-ABK23411 represent cDNA

CC molecules encoding human Zmax1 and HBM, and PCR primers, probes, linkers

CC and adapters of the invention

XX

SQ Sequence 18 BP; 5 A; 3 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 18;

Best Local Similarity 93.8%; Pred. No. 1.9e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 853 ACTTCTCTCGGACAC 868

DB ||||| ||||| |||||

17 ACTTTCATCTGGACAC 2

RESULT 229

ACC45477/C

ID ACC45477 standard; DNA; 18 BP.

XX ACC45477;

XX

XX 02-JUN-2003 (first entry)

XX Human HBM STS marker reverse primer #28.

XX

XX Human; high bone mass; HBM; LRP5; LRP6; transgenic; bone mass modulation;

XX gene therapy; bone density modulation; bone strength; trabecular number;

XX bone size; bone tissue connectivity; bone disease; osteoporosis; PCR;

XX osteomalacia; rickets; Paget's disease; neoplasm of the bone; primer; ss.

XX

XX Homo sapiens.

XX

XX WO200292764-A2.

XX

XX 21-NOV-2002.

XX

XX 13-MAY-2002; 2002WO-US014876.

XX

XX 11-MAY-2001; 2001US-0290071P.

XX

XX 17-MAY-2001; 2001US-0291311P.

XX

XX 01-FEB-2002; 2002US-0353058P.

XX

XX 04-MAR-2002; 2002US-0361293P.

XX

XX (GENO-) GENOME THERAPEUTICS CORP.

XX (AMHP ) WYETH.

XX

XX Babij P, Bex FJ, Yaworsky PJ, Bodine PV;

XX

XX WPI; 2003-129278/12.

XX

XX New transgenic animals (e.g. mice), useful as models for studying bone

XX density modulation, developing drugs for treating or preventing bone

XX diseases (e.g. osteoporosis), or diagnosing diseases characterized by

XX reduced bone density.

XX

PT

PS Disclosure; Page 54; 603pp; English.

XX The invention relates to novel transgenic animals expressing the high

CC bone mass (HBM) gene, expressing the corresponding wild type HBM gene,

CC comprising an alteration of the gene encoding LRP5 or LRP6, or expressing

CC an LRP5 that is modulated by an altered gene control sequence introduced

CC by homologous or non-homologous recombination. The transgenic animals are

CC for the study of bone density modulation or bone mass modulation. The

CC invention has osteopathic and cytostatic activity. The polynucleotides of

CC the invention may have a use in gene therapy. The transgenic animals and

CC nucleic acids are for the study of bone density modulation, where the

CC bone mass is modulated relative to non-transgenic animals of the same

CC species in more than one parameter selected from bone density, bone

CC strength, trabecular number, bone size, or bone tissue connectivity. The

CC transgenic animals, nucleic acids and methods are useful for identifying

CC molecules involved in bone development, and for developing pharmaceutical

CC compositions, which may be employed for treating or preventing bone

CC diseases, e.g. osteoporosis, osteomalacia, rickets, Paget's disease, or

CC neoplasms of the bone. The transgenic animals and nucleic acids are also

CC useful in methods for diagnosing diseases involved in bone development,

CC or characterised by reduced bone density or mass. The present sequence is

CC used in the exemplification of the invention

XX

SQ Sequence 18 BP; 5 A; 3 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 18;

Best Local Similarity 93.8%; Pred. No. 1.9e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 853 ACTTCTCTCGGACAC 868

DB ||||| ||||| |||||

17 ACTTTCATCTGGACAC 2

RESULT 230

ADB98175/C

ID ADB98175 standard; DNA; 18 BP.

XX ADB98175;

XX

XX 04-DEC-2003 (first entry)

XX

XX Sequence tagged site #56 used to prepare map of Zmax1 (LRP5) gene region.

XX Osteopathic; Gene therapy; High Bone Mass; HBM; LRP5; Zmax1; LRP6;

XX bone mass modulation; osteoporosis; STS; sequence tagged site; ds.

XX

XX Homo sapiens.

XX

XX WO200292000-A2.

XX

XX 21-NOV-2002.

XX

XX 13-MAY-2002; 2002WO-US014877.

XX

XX 11-MAY-2001; 2001US-0290071P.

XX

XX 17-MAY-2001; 2001US-0291311P.

XX

XX 01-FEB-2002; 2002US-0353058P.

XX

XX 04-MAR-2002; 2002US-0361293P.

XX

XX (GENO-) GENOME THERAPEUTICS CORP.

XX (AMHP ) WYETH.

XX

XX Allen K, Anisowicz A, Graham JR, Morales A, Yaworsky PJ, Liu W;

XX

XX WPI; 2003-129214/12.

XX

XX New nucleic acid comprising a mutation in LRP5 or LRP6, useful for

XX diagnosing a HBM-like phenotype in a subject and for preparing a

XX composition for modulating bone mass and/or lipid levels in a subject

XX suffering from e.g. osteoporosis.

XX

XX Example 2; Page 61; 629pp; English.

```
XX The present invention relates to High Bone Mass (HBM), LRP5 (Zmax1) and
CC LRP6 mutants, which results in a HBM-like phenotype when expressed in a
CC cell. The HBM-like phenotype results in bone mass modulation and/or lipid
CC level modulation. The invention is useful for diagnosing a HBM-like
CC phenotype in a subject and for preparing a composition for modulating
CC bone mass and/or lipid levels in a subject suffering from e.g.
CC osteoporosis. The present sequence is a Sequence Tagged Site (STS)
CC marker, which was used to prepare a physical map of the Zmax1 (LRP5) gene
CC region.
XX
SQ Sequence 18 BP; 5 A; 3 C; 6 G; 4 T; 0 U; 0 Other;

Query Match      0.7%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 1.9e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 853 ACTTCTCTCTGGACAC 868
Db 17 ACTTCTCTCTGGACAC 2

RESULT 232
ADRI7040/c
XX ADRI7040 standard; DNA; 18 BP.
AC ADR47691;
XX ADR47691;
DT 02-DEC-2004 (first entry)
XX
DE Human chromosome 11 Zmax1 region reverse mapping primer #28.
XX
KW Human; ss; PCR; high bone mass; Zmax1; HBM; bone modulation;
KW bone development disorder; osteoporosis; chromosome 11; gene therapy;
KW primer.
XX
OS Homo sapiens.
XX
PN US2004176582-A1.
PD 09-SEP-2004.
XX
PF 10-DEC-2003; 2003US-00731739.
XX
PR 13-JAN-1998; 98US-0071449P.
PR 23-OCT-1998; 98US-0105511P.
PR 13-JAN-1999; 99US-00229319.
PR 05-APR-2000; 2000US-00544398.
XX
PA (GENO-) GENOME THERAPEUTICS CORP.
PA (UYCR-) UNIV CREIGHTON.
XX
PI Carulli JP, Little RD, Recker RR, Johnson ML;
XX WPI; 2004-661408/64.
DR
XX
PT New nucleic acid sequence encoding high bone mass, useful in diagnosing,
PT treating and/or preventing osteoporosis.
XX
PS Disclosure; SEQ ID NO 122; 303pp; English.
XX
CC The invention relates to an isolated nucleic acid sequence encoding a
CC high bone mass protein (HBM). The gene exists in two alleles, Zmax1, the
CC notional wild-type (the CDNA for which appears as ADR47570 encoding
CC ADR47572) and the HBM allele (the CDNA for which appears as ADR47571
CC encoding ADR47573). The two alleles differ by a single nucleotide
CC polymorphism (G to T at position 582 of ADR47570) causing a Gly to Val
CC change at position 171 of the protein. Also included are a replicative
CC cloning vector comprising HBM/Zmax1 (and a replicon operative in an
CC isolated host cell), an expression vector comprising HBM/Zmax1 operably
CC linked to a transcription regulatory region, an isolated host cell
CC transformed with the vector(s), a method for testing a substance as a
CC therapeutic agent for bone modulation in a host, a method of identifying
CC a molecule involved in bone modulation, a method for identifying a
CC (candidate) protein involved in bone modulation, a method of testing for
CC HBM activity, a method of developing a pharmaceutical for the treatment
CC of bone development disorders, a method for treating a bone development
CC disorder in an animal, a method of altering bone development in a host, a
CC method for diagnostic screening for a genetic predisposition to a bone
CC development disorder, a diagnostic assay for bone development disorders,
CC a method of expressing the HBM protein in bone tissue, a bacterial
```

CC artificial chromosome comprising HBM/Zmax1 sequence (appearing as  
 CC ADR47574-ADR47580), a method for amplifying a nucleotide polymorphism in  
 CC the Zmax1 or HBM gene, a method for identifying a regulatory element of a  
 CC HBM gene and an isolated nucleic acid segment of at least 15 contiguous  
 CC nucleotides including a polymorphic site from HBM/Zmax1. The nucleic acid  
 CC molecule and the encoded polypeptide, composition, and methods are useful  
 CC in diagnosing, treating and preventing a bone development disorder, i.e.  
 CC osteoporosis. The gene for HBM/Zmax1 is located on chromosome 11q13.3.  
 CC The present sequence is a primer used in the mapping of the HBM/Zmax1  
 CC gene.

XX Sequence 18 BP; 5 A; 3 C; 6 G; 4 T; 0 U; 0 Other;  
 SQ

Query Match 0.7%; Score 14.4; DB 1; Length 18;  
 Best Local Similarity 93.8%; Pred. No. 1.9e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 853 ACTTCTCTGGACAC 868  
 Db 17 ACTTCTCTGGACAC 2

## RESULT 233

AAV0345  
 ID AAT90345 standard; DNA; 19 BP.

XX  
 AC AAT90345;

XX  
 DT 16-JAN-1998 (first entry)

XX Epithelial protein (precancer marker) gene probe/primer.

DE  
 XX Epithelial protein; heterogeneous nuclear ribonuclear protein;  
 KW 703D4 antigen; hRNP-A2; hRNP-B1; lung cancer; liver cancer;  
 KW renal cancer; prostate cancer; melanoma; head cancer; neck cancer;  
 KW myeloma; marker; carcinogenesis; diagnosis; human;  
 KW polymerase chain reaction; PCR; primer; probe; ss.

XX Synthetic.

XX WO9712975-A1.

XX 10-APR-1997.

XX PF 02-OCT-1996; 96WO-US015825.

XX PR 02-OCT-1995; 95US-00538711.

XX PR 02-OCT-1996; 96US-00725027.

XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.

PA (UYJO ) UNIV JOHNS HOPKINS.

PI Mulshine JL, Tockman MS;

XX WPI; 1997-226219/20.

XX A new purified protein from epithelial cells - is expressed in high  
 PT amounts in cancer and pre-cancer cells; used as a marker for diagnosis  
 PT and treatment of cancer.

XX Example 11; Page 89; 171pp; English.

XX This synthetic oligonucleotide can be used as a probe or PCR primer for  
 CC the detection or amplification of a nucleic acid sequence encoding an  
 CC epithelial protein (see AAW26546-51) that is useful in early cancer  
 CC detection. It can also be used in methods for detecting epithelial  
 CC protein mRNA in a biological sample. Such methods are important in  
 CC detecting and differentiating precancer and cancer cells and normal cells  
 CC and in detecting subsets of epithelial cells destined to become cancer  
 CC cells. Diagnostic screens are claimed for lung, renal, breast or prostate  
 CC cancer, myeloma and melanoma

XX Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 19;  
 Best Local Similarity 93.8%; Pred. No. 2.1e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1879 CAGCATCACCTCAGC 1894  
 Db 4 CAGCATCAACCTCAGC 19

## RESULT 234

AAV07132  
 ID AAV07132 standard; cDNA; 19 BP.

XX  
 AC AAV07132;

XX 09-SEP-1998 (first entry)

XX Nucleotide sequence of a PCR primer.

DE  
 XX Ribonucleotide protein; hRNP-A2; human epithelial peptide; marker;  
 KW cancer; probe; hybridisation; primer; amplification; lung; liver; kidney;  
 KW breast; prostate; melanoma; myeloma; antibody; PCR; ss.

XX Synthetic.

XX Homo sapiens.

XX WO9814469-A2.

XX 09-APR-1998.

XX PF 02-OCT-1997; 97WO-US017714.

XX PR 02-OCT-1996; 96US-00725027.

XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.

PA (UYJO ) UNIV JOHNS HOPKINS.

PI Mulshine JL, Tockman MS;

XX WPI; 1998-240016/21.

XX New isolated epithelial protein as early marker of cancer - useful in  
 PT computer-assisted methods of diagnosis based on discriminant analysis of  
 PT optical images of cells.

XX Disclosure; Page 34; 159pp; English.

XX This is the nucleotide sequence of a PCR primer used for amplification in  
 CC the method of the invention. Probes and primers that hybridise to or  
 CC amplify these peptides are used to diagnose precancerous states, e.g. of  
 CC lung, liver, kidney, breast, prostate, head or neck, melanoma or myeloma,  
 CC or to determine susceptibility to these conditions and for monitoring  
 CC treatment. Precancer is also indicated by detecting post-translational  
 CC modification of the epithelial peptide which is a marker of epithelial  
 CC cell transformation. Antibodies are potentially useful for diagnosis and  
 CC treatment of cancer

XX Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 19;  
 Best Local Similarity 93.8%; Pred. No. 2.1e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1879 CAGCATCACCTCAGC 1894  
 Db 4 CAGCATCAACCTCAGC 19

## RESULT 235

AAV40938/c

ID AAV40938 standard; DNA; 19 BP.

XX

```

AC AAV40938;
XX
XX 25-SEP-1998 (first entry)
XX
XX Primer BCRI:1338U19 for abnormality detection.
XX
XX PCR primer; chromosomal abnormality; abnormality detection; leukaemia;
XX lymphoma; carcinoma; adenocarcinoma; sarcoma; glioma; neuroblastoma;
XX medullablastoma; malignant melanoma; malignant neoplastic condition; ss.
XX
XX Synthetic.
XX Homo sapiens.
XX
XX WO9824928-A2.
XX
XX 11-JUN-1998.
XX
XX 08-DEC-1997; 97WO-DK000556.
XX
XX 06-DEC-1996; 96DK-00001401.
XX
XX (PALL/) PALLISGAARD N.
XX
XX Pallsigaard N, Hokland P;
XX
XX WPI; 1998-333344/29.
XX
XX Detection of chromosomal abnormalities - by subjecting patient sample
XX nucleic acids to a multiplex molecular amplification procedure using
XX primers specific for characteristic nucleic acid sequence.
XX
XX Claim 73; Page 70; 126pp; English.
XX
XX This sequence represents a primer used in the method of the invention for
XX the detection of the presence or absence of chromosomal abnormalities,
XX each abnormality being associated with a condition in a subject and each
XX being defined by at least one characteristic nucleic acid sequence. The
XX method comprises: (a) obtaining a sample of nucleic acids derived from a
XX subject which may harbour one of the chromosomal abnormalities; (b)
XX subjecting the sample to a multiplex molecular amplification (MMA)
XX procedure, where a number of the characteristic sequences, if present in
XX a sufficient amount, will be amplified; (c) retrieving the product(s)
XX from step (b), and detecting the presence and/or absence of an amplicon
XX characteristic of the abnormal sequences to detect the presence or
XX absence of corresponding chromosomal abnormalities; where the MMA
XX procedure comprises the use of at least 7 mutually distinct primers (MDP)
XX in one single reaction mixture, each of the primers defining an end of at
XX least one characteristic nucleic acid sequence, and where at least one of
XX the primers defines the first end of at least two characteristic nucleic
XX acid sequences, the characteristic nucleic acid sequences each being
XX determined in their opposite ends by MDP selected from the remainder of
XX the MDP. The methods can be used for detecting chromosomal abnormalities
XX associated with diseases including numerous leukaemia's, lymphoma's,
XX carcinoma's, adenocarcinoma's, sarcoma's, glioma's, neuroblastoma's,
XX medullablastoma, malignant melanoma, and malignant neoplastic conditions
XX
XX Sequence 19 BP; 8 A; 6 C; 5 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.4; DB 1; Length 19;
XX Best Local Similarity 93.8%; Pred. No. 2.1e+02;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1899 TGGGCTGGCATTTCTTG 1914
XX |||||||
XX 16 TGGGCTGGCTTTCTTG 1
XX
XX RESULT 236
XX AA272391
XX ID AA272391 standard; DNA; 19 BP.
XX
XX AC AA272391;
XX
XX

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DT 10-SEP-2001 (first entry)
XX
XX Human biallelic marker upstream amplification primer SEQ ID NO:6747.
XX
XX Human genome; biallelic marker; high density disequilibrium map;
XX genomic map; haplotype; phenotype; polymorphic base; genotyping;
XX haplotyping; hybridisation; identification; characterisation;
XX amplification; single nucleotide polymorphism; SNP; PCR primer;
XX diagnosis; ss.
XX
XX Homo sapiens.
XX
XX WO9954500-A2.
XX
XX 28-OCT-1999.
XX
XX 21-APR-1999; 99WO-IB000822.
XX
XX 21-APR-1998; 98US-0082614P.
XX
XX 23-NOV-1998; 98US-0109732P.
XX
XX (GEST ) GENSET.
XX
XX Cohen D, Blumenfeld M, Chumakov I;
XX
XX WPI; 2000-013267/01.
XX
XX Novel biallelic markers used to construct a high density disequilibrium
XX map of the human genome.
XX
XX Claim 9; Page 1669; 2745pp; English.
XX
XX AA265654 to AA269578 represent human biallelic markers from the present
XX invention, which contain a polymorphic base at position 24 of their
XX nucleotide sequences. AA269579 to AA277440 represent amplification
XX primers for the biallelic markers. The biallelic markers of the invention
XX have a variety of uses: they can be used for high density mapping of the
XX human genome, and in complex association studies and haplotyping studies
XX which are useful in determining the genetic basis for disease states.
XX Compositions and methods of the invention can also be useful for the
XX identification of the targets for the development of pharmaceutical
XX agents and diagnostic methods, as well as the characterisation of the
XX differential efficacious responses to and side effects from
XX pharmaceutical agents acting on a disease as well as other treatment.
XX N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
XX 3367, are not actually given a sequence in the Sequence Listing from the
XX present invention
XX
XX Sequence 19 BP; 5 A; 6 C; 2 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.4; DB 1; Length 19;
XX Best Local Similarity 93.8%; Pred. No. 2.1e+02;
XX Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1204 CTTTCAGAGTACAAAT 1219
XX |||||||
XX 2 CTTTCAGAGTACCAAT 17
XX
XX Db
XX
XX RESULT 237
XX AAD30312/c
XX ID AAD30312 standard; DNA; 19 BP.
XX
XX AC AAD30312;
XX
XX 17-MAY-2002 (first entry)
XX
XX Human PKD1 gene mutation detecting nested PCR primer, 15F5.
XX
XX Human; PKD1 gene; autosomal dominant polycystic kidney disease; ADPKD;
XX acquired cystic disease; transgenic animal; PCR primer; ss.
XX
XX Homo sapiens.

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PF 20-FEB-2003; 2003WO-US005022.
XX
XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 29-MAY-2002; 2002WO-US017674.
PR 06-JUN-2002; 2002US-0386782P.
PR 03-JUL-2002; 2002US-0393796P.
PR 29-JUL-2002; 2002US-0399348P.
PR 28-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 04-NOV-2002; 2002US-00287949.
PR 27-NOV-2002; 2002US-00306747.
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L, Pavco P;
PI
XX WPI; 2003-679876/64.
DR
XX New double-stranded interfering nucleic acid, useful e.g. for treatment
PT and diagnosis of cancer, downregulates the vascular endothelial growth
PT factor receptor gene.
XX
XX Example 3; SEQ ID NO 14; 207pp; English.
XX
XX The present invention describes a double-stranded short interfering
CC nucleic acid (siNA) that downregulates expression of the vascular
CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a
CC siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo
CC delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors
CC that express siNA; and (5) single-stranded siNA with similar properties.
CC The siNAs have antiangiogenic, cytostatic, antidiabetic,
CC ophthalmological, antiarthritic, antipsoriatic, nephrotropic and
CC gynaecological activities. The siNA are useful for modulating
CC (downregulating) the expression of VEGFR genes. The siNA are potentially
CC useful for treating a wide range of angiogenesis-associated conditions,
CC particularly cancers, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,
CC and polycystic kidney disease. The siNA may also be useful for diagnosis,
CC drug screening, target identification and validation, genetic
CC engineering, studying gene function, and also for gene mapping (e.g. of
CC single-nucleotide polymorphisms). The present sequence is used in the
CC exemplification of the present invention.
XX
XX Sequence 19 BP; 2 A; 8 C; 6 G; 0 T; 3 U; 0 Other;
SQ
Query Match 0.7%; Score 14.4; DB 1; Length 19;
Best Local Similarity 75.0%; Pred. No. 2.1e+02;
Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
QY 1223 GTCGCGCTCACTATGG 1238
Db |:|:|:|:|:|:|:|
4 GUCGCGCUCACCAUGG 19
RESULT 240
ADF36152/c
ID ADF36152 standard; RNA; 19 BP.
XX
XX ADF36152;
AC
XX 12-FEB-2004 (first entry)
DT
XX Human VEGFR1 short interfering nucleic acid (siNA) SEQ ID NO:441.
DE
XX double-stranded short interfering nucleic acid;
XX short interfering nucleic acid; siNA; downregulation;
KW vascular endothelial growth factor receptor; VEGFR; antiangiogenic;
KW cytostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;
KW nephrotropic; gynaecological; angiogenesis-associated condition; cancer;
KW diabetic retinopathy; macular degeneration; neovascular glaucoma;
KW

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```

KW arthritis; psoriasis; endometriosis; angiofibroma;
KW polycystic kidney disease; ss.
XX Synthetic.
OS Homo sapiens.
XX WO2003070910-A2.
PN
XX 28-AUG-2003.
PD
XX 20-FEB-2003; 2003WO-US005022.
PF
XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 29-MAY-2002; 2002WO-US017674.
PR 06-JUN-2002; 2002US-0386782P.
PR 03-JUL-2002; 2002US-0393796P.
PR 29-JUL-2002; 2002US-0399348P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 04-NOV-2002; 2002US-00287949.
PR 27-NOV-2002; 2002US-00306747.
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L, Pavco P;
PI
XX WPI; 2003-679876/64.
DR
XX New double-stranded interfering nucleic acid, useful e.g. for treatment
PT and diagnosis of cancer, downregulates the vascular endothelial growth
PT factor receptor gene.
XX
XX Example 3; SEQ ID NO 441; 207pp; English.
XX
XX The present invention describes a double-stranded short interfering
CC nucleic acid (siNA) that downregulates expression of the vascular
CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a
CC siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo
CC delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors
CC that express siNA; and (5) single-stranded siNA with similar properties.
CC The siNAs have antiangiogenic, cytostatic, antidiabetic,
CC ophthalmological, antiarthritic, antipsoriatic, nephrotropic and
CC gynaecological activities. The siNA are useful for modulating
CC (downregulating) the expression of VEGFR genes. The siNA are potentially
CC useful for treating a wide range of angiogenesis-associated conditions,
CC particularly cancers, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,
CC and polycystic kidney disease. The siNA may also be useful for diagnosis,
CC drug screening, target identification and validation, genetic
CC engineering, studying gene function, and also for gene mapping (e.g. of
CC single-nucleotide polymorphisms). The present sequence is used in the
CC exemplification of the present invention.
XX
XX Sequence 19 BP; 2 A; 8 C; 6 G; 0 T; 3 U; 0 Other;
SQ
Query Match 0.7%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 2.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1223 GTCGCGCTCACTATGG 1238
Db |:|:|:|:|:|:|:|
16 GTCGCGCTCACCATTGG 1
RESULT 241
ADF71257/c
ID ADF71257 standard; RNA; 19 BP.
XX
XX ADF71257;
AC
XX

```

DT 12-FEB-2004 (first entry)  
DE Protein tyrosine phosphatase type IV (PRL3) gene siNA, SEQ ID No 42.  
XX  
XX short interfering nucleic acid; siNA;  
KW protein tyrosine phosphatase type IV; PRL3; RNA interference; cytostatic;  
KW cancer; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO2003070886-A2.  
XX  
XX 28-AUG-2003.  
XX  
XX 11-FEB-2003; 2003WO-US0004347.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Mcswiggen J, Beigelman L, Usman N;  
XX WPI; 2003-697606/66.  
XX  
XX New short interfering nucleic acid, useful e.g. for treatment and  
PT diagnosis of cancer, downregulates expression of a protein tyrosine  
PT phosphatase type IVa gene.  
XX  
XX Example 3; SEQ ID NO 42; 131pp; English.  
XX  
XX The invention relates to a novel short interfering nucleic acid (siNA)  
CC that downregulates expression of a protein tyrosine phosphatase type IV  
CC (PRL3) gene by RNA interference. The invention further relates to  
CC modulating the expression of PRL3 genes in cells, tissue explants or  
CC organisms by the introduction of an siNA; kits for in vitro or in vivo  
CC delivery of an siNA; conjugates and/or complexes of siNA; and vectors  
CC that express siNA. The novel siNA's of the invention have cytostatic  
CC tissue explants or organisms, e.g. for treating cancer but also for drug  
CC screening; diagnosis; target identification and validation; genetic  
CC engineering; pharmacogenomics; studying gene function and gene mapping  
CC (e.g. of single-nucleotide polymorphisms). This polynucleotide sequence  
CC represents a short interfering nucleic acid for downregulating the  
CC expression of a protein tyrosine phosphatase type IV (PRL3) gene of the  
CC invention.  
XX  
XX Sequence 19 BP; 5 A; 7 C; 6 G; 0 T; 1 U; 0 Other;  
SQ  
Query Match 0.7%; Score 14.4; DB 1; Length 19;  
Best Local Similarity 93.8%; Pred. No. 2.1e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 967 TTGATGGTTCCGGCGC 982  
DB 19 TTGATGGTTCCGGCGC 4  
RESULT 242  
ADDF1331  
ID ADF71331 standard; RNA; 19 BP.  
XX  
XX ADF71331;  
XX  
XX 12-FEB-2004 (first entry)  
XX  
XX Protein tyrosine phosphatase type IV (PRL3) gene siNA, SEQ ID No 116.  
DE  
XX

KW short interfering nucleic acid; siNA;  
KW protein tyrosine phosphatase type IV; PRL3; RNA interference; cytostatic;  
KW cancer; ss.  
XX  
XX Homo sapiens.  
XX  
XX WO2003070886-A2.  
XX  
XX 28-AUG-2003.  
XX  
XX 11-FEB-2003; 2003WO-US0004347.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Mcswiggen J, Beigelman L, Usman N;  
XX WPI; 2003-697606/66.  
XX  
XX New short interfering nucleic acid, useful e.g. for treatment and  
PT diagnosis of cancer, downregulates expression of a protein tyrosine  
PT phosphatase type IVa gene.  
XX  
XX Example 3; SEQ ID NO 116; 131pp; English.  
XX  
XX The invention relates to a novel short interfering nucleic acid (siNA)  
CC that downregulates expression of a protein tyrosine phosphatase type IV  
CC (PRL3) gene by RNA interference. The invention further relates to  
CC modulating the expression of PRL3 genes in cells, tissue explants or  
CC organisms by the introduction of an siNA; kits for in vitro or in vivo  
CC delivery of an siNA; conjugates and/or complexes of siNA; and vectors  
CC that express siNA. The novel siNA's of the invention have cytostatic  
CC tissue explants or organisms, e.g. for treating cancer but also for drug  
CC screening; diagnosis; target identification and validation; genetic  
CC engineering; pharmacogenomics; studying gene function and gene mapping  
CC (e.g. of single-nucleotide polymorphisms). This polynucleotide sequence  
CC represents a short interfering nucleic acid for downregulating the  
CC expression of a protein tyrosine phosphatase type IV (PRL3) gene of the  
CC invention.  
XX  
XX Sequence 19 BP; 1 A; 6 C; 7 G; 0 T; 5 U; 0 Other;  
SQ  
Query Match 0.7%; Score 14.4; DB 1; Length 19;  
Best Local Similarity 68.8%; Pred. No. 2.1e+02;  
Matches 11; Conservative 4; Mismatches 1; Indels 0; Gaps 0;  
QY 967 TTGATGGTTCCGGCGC 982  
DB 1 UUGAUGGCCUCCGGCGC 16  
RESULT 243  
ADR78172/C  
ID ADR78172 standard; DNA; 19 BP.  
XX  
XX ADR78172;  
XX  
XX 16-DEC-2004 (first entry)  
XX  
XX Human apolipoprotein B (ApoB) oligonucleotide seqid 2657.  
XX  
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;

KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 2657; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described  
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX stabilising (I), involves selecting a sequence with activity and  
XX the modification decreases nuclease sensitivity while not decreasing its  
XX activity; a kit comprising (I) and instruction for its use; and a device  
XX that can be dispense or administer a composition comprising (I). (I) is  
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
XX The subject is suffering from a disorder characterised by elevated or  
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
XX inhibit hepatic glucose production or for treating glucose-metabolism-  
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
XX lung cancer), neurological disease (e.g., Huntington disease or  
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
XX can be used to control ApoB gene expression.  
XX  
XX Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other;  
SQ

Query Match 0.7%; Score 14.4; DB 1; Length 19;  
Best Local Similarity 93.8%; Pred. No. 2.1e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 1582 TCAATCAGCTGTGCCA 1597  
DB 17 TCAATCAGCTGTGCCA 2  
RESULT 244  
ADR75932/c  
ID ADR75932 standard; DNA; 19 BP.  
XX  
AC ADR75932;  
XX  
DT 16-DEC-2004 (first entry)  
XX  
DE Human apolipoprotein B (ApoB) oligonucleotide seqid 417.  
XX  
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
KW RNA interference; iRNA; antisense technology; lipid metabolism;  
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
KW coronary artery disease; CAD; coronary heart disease; CHD;  
KW atherosclerosis; hepatic glucose production;  
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
KW colon cancer; lung cancer; neurological disease; Huntington disease;  
KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2004080406-A2.  
XX  
XX 23-SEP-2004.  
XX  
XX 08-MAR-2004; 2004WO-US007070.  
XX  
XX 07-MAR-2003; 2003US-0452682P.  
XX 12-MAR-2003; 2003US-0454265P.  
XX 13-MAR-2003; 2003US-0454962P.  
XX 13-MAR-2003; 2003US-0455050P.  
XX 14-APR-2003; 2003US-0462894P.  
XX 17-APR-2003; 2003US-0463772P.  
XX 25-APR-2003; 2003US-0465665P.  
XX 25-APR-2003; 2003US-0465802P.  
XX 09-MAY-2003; 2003US-0469612P.  
XX 08-AUG-2003; 2003US-0493986P.  
XX 11-AUG-2003; 2003US-0494597P.  
XX 26-SEP-2003; 2003US-0506341P.  
XX 09-OCT-2003; 2003US-0510246P.  
XX 10-OCT-2003; 2003US-0510318P.  
XX 07-NOV-2003; 2003US-0518453P.  
XX  
XX (ALNY-) ALNYLAM PHARM.  
XX  
XX Manoharan M, Bumcrot D;  
XX  
XX WPI; 2004-677362/66.  
XX  
XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
XX disease, diabetes, cancer or neurological disease, comprises sense  
XX sequence and antisense sequence which has specific modifications.  
XX  
XX Example 5; SEQ ID NO 2657; 378pp; English.  
XX  
XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
XX sense sequence and an antisense sequence, where the sense sequences have  
XX one or more asymmetrical 2'-O alkyl modifications, the antisense  
XX sequences have one or more asymmetrical phosphorothioate modifications  
XX and the antisense sequence targets a human gene sequence. Also described  
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
XX levels or glucose-6-phosphatase levels in a subject; producing (I);  
XX stabilising (I), involves selecting a sequence with activity and  
XX introducing one or more asymmetrical modification in the sequence, where  
XX the modification decreases nuclease sensitivity while not decreasing its  
XX activity; a kit comprising (I) and instruction for its use; and a device  
XX that can be dispense or administer a composition comprising (I). (I) is  
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
XX The subject is suffering from a disorder characterised by elevated or  
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The  
XX disorder is chosen from the HDL/LDL cholesterol imbalance,  
XX dyslipidaemias, hypercholesterolaemia, statin-resistant  
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to  
XX inhibit hepatic glucose production or for treating glucose-metabolism-  
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or  
XX lung cancer), neurological disease (e.g., Huntington disease or  
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
XX represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
XX can be used to control ApoB gene expression.  
XX  
XX Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other;  
SQ

CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.4; DB 1; Length 19;  
 Best Local Similarity 93.8%; Pred. No. 2.1e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1582 TCAATCAGCTGTGCCA 1597  
 Db 16 TCAATCAGCTGTGCCA 1

RESULT 245  
 ADR78998/c  
 ID ADR78998 standard; DNA; 19 BP.  
 XX ADR78998;  
 AC ADR78998;  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3483.

XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US0007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.

PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 3483; 378pp; English.  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.4; DB 1; Length 19;  
 Best Local Similarity 93.8%; Pred. No. 2.1e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1582 TCAATCAGCTGTGCCA 1597  
 Db 19 TCAATCAGCTGTGCCA 4

RESULT 246  
 ADR78999/c  
 ID ADR78999 standard; DNA; 19 BP.  
 XX ADR78999;  
 AC ADR78999;  
 DT 16-DEC-2004 (first entry)  
 XX Human apolipoprotein B (ApoB) oligonucleotide seqid 3484.  
 XX antilipemic; cardiatic; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;

KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 14-MAR-2003; 2003US-0455050P.  
 PR 15-MAR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0493986P.  
 PR 08-AUG-2003; 2003US-049612P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 3484; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX SQ Sequence 19 BP; 4 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.4; DB 1; Length 19;  
 Best Local Similarity 93.8%; Pred. No. 2.1e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1582 TCAATCAGCTGTGGCA 1597  
 Db |||||  
 18 TCAATCAGCTGTGGCA 3  
 RESULT 247  
 ADR75554/c  
 ID ADR75554 standard; DNA; 19 BP.  
 XX  
 AC ADR75554;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (Apob) oligonucleotide seqid 39.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apob; ss.  
 XX  
 OS Homo sapiens.  
 XX WO2004080406-A2.  
 XX 23-SEP-2004.  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454962P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 25-APR-2003; 2003US-0465802P.  
 PR 09-MAY-2003; 2003US-0493986P.  
 PR 08-AUG-2003; 2003US-049612P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX (ALNY-) ALNYLAM PHARM.  
 XX PA Manoharan M, Bumcrot D;  
 PI WPI; 2004-677362/66.  
 DR Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX Example 5; SEQ ID NO 39; 378pp; English.  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apob-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (Apob) antisense oligonucleotide that  
 CC can be used to control Apob gene expression.  
 XX SQ Sequence 19 BP; 4 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.4; DB 1; Length 19;  
 Best Local Similarity 93.8%; Pred. No. 2.1e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1582 TCAATCAGCTGTGCCA 1597  
 DB 17 TCAATCAGCTGTGCCA 2  
 RESULT 248  
 ADR76380/C  
 ID ADR76380 standard; DNA; 19 BP.  
 XX  
 AC ADR76380;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 865.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 08-MAR-2004; 2004WO-US0007070.  
 XX  
 PR 07-MAR-2003; 2003US-0452682P.  
 PR 12-MAR-2003; 2003US-0454265P.  
 PR 13-MAR-2003; 2003US-0454862P.  
 PR 13-MAR-2003; 2003US-0455050P.  
 PR 14-APR-2003; 2003US-0462894P.  
 PR 17-APR-2003; 2003US-0463772P.  
 PR 25-APR-2003; 2003US-0465665P.  
 PR 28-APR-2003; 2003US-0465802P.  
 PR 08-MAY-2003; 2003US-0469612P.  
 PR 08-AUG-2003; 2003US-0493986P.  
 PR 11-AUG-2003; 2003US-0494597P.  
 PR 26-SEP-2003; 2003US-0506341P.  
 PR 09-OCT-2003; 2003US-0510246P.  
 PR 10-OCT-2003; 2003US-0510318P.  
 PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 PA (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;  
 XX WPI; 2004-677362/66.  
 DR  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 PT disease, diabetes, cancer or neurological disease, comprises sense  
 PT sequence and antisense sequence which has specific modifications.  
 XX  
 PS Example 5; SEQ ID NO 865; 378pp; English.  
 XX  
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a  
 CC sense sequence and an antisense sequence, where the sense sequences have  
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 CC sequences have one or more asymmetrical phosphorothioate modifications  
 CC and the antisense sequence targets a human gene sequence. Also described  
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 CC stabilising (I), involves selecting a sequence with activity and  
 CC introducing one or more asymmetrical modification in the sequence, where  
 CC the modification decreases nuclease sensitivity while not decreasing its  
 CC activity; a kit comprising (I) and instruction for its use; and a device  
 CC that can be dispense or administer a composition comprising (I). (I) is  
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.  
 CC The subject is suffering from a disorder characterised by elevated or  
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.  
 XX  
 SQ Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.4; DB 1; Length 19;  
 Best Local Similarity 93.8%; Pred. No. 2.1e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1582 TCAATCAGCTGTGCCA 1597  
 DB 19 TCAATCAGCTGTGCCA 4  
 RESULT 249  
 ADR76381/C  
 ID ADR76381 standard; DNA; 19 BP.  
 XX  
 AC ADR76381;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 866.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cyostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 XX  
 OS Homo sapiens.  
 XX

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PN WO2004080406-A2.
XX
XX
PD
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX PR 12-MAR-2003; 2003US-0454265P.
XX PR 13-MAR-2003; 2003US-0454962P.
XX PR 13-MAR-2003; 2003US-0455050P.
XX PR 14-APR-2003; 2003US-0462894P.
XX PR 17-APR-2003; 2003US-0463772P.
XX PR 25-APR-2003; 2003US-0465665P.
XX PR 25-APR-2003; 2003US-0465802P.
XX PR 09-MAY-2003; 2003US-0469612P.
XX PR 08-AUG-2003; 2003US-0493986P.
XX PR 11-AUG-2003; 2003US-0494597P.
XX PR 26-SEP-2003; 2003US-0506341P.
XX PR 09-OCT-2003; 2003US-0510246P.
XX PR 10-OCT-2003; 2003US-0510318P.
XX PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX PT disease, diabetes, cancer or neurological disease, comprises sense
XX PT sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 866; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX CC sense sequence and an antisense sequence, where the sense sequences have
XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense
XX CC sequences have one or more asymmetrical phosphorothioate modifications
XX CC and the antisense sequence targets a human gene sequence. Also described
XX CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX CC levels or glucose-6-phosphatase levels in a subject; producing (I);
XX CC stabilising (I), involves selecting a sequence with activity and
XX CC introducing one or more asymmetrical modification in the sequence, where
XX CC the modification decreases nuclease sensitivity while not decreasing its
XX CC activity; a kit comprising (I) and instruction for its use; and a device
XX CC that can be dispense or administer a composition comprising (I). (I) is
XX CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX CC The subject is suffering from a disorder characterised by elevated or
XX CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX CC disorder is chosen from the HDL/LDL cholesterol imbalance,
XX CC dyslipidaemias, hypercholesterolaemia, statin-resistant
XX CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX CC inhibit hepatic glucose production or for treating glucose-metabolism-
XX CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX CC lung cancer), neurological disease (e.g., Huntington disease or
XX CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
XX CC can be used to control ApoB gene expression.
XX
XX Sequence 19 BP; 4 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 2.1e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1582 TCAATCAGCTGTGCCA 1597
DB 18 TCAATCAGCTGTGCCA 3

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RESULT 250  
 ADR78550/c  
 ID ADR78550 standard; DNA; 19 BP.  
 XX  
 AC ADR78550;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3035.  
 XX  
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;  
 KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;  
 KW RNA interference; iRNA; antisense technology; lipid metabolism;  
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;  
 KW coronary artery disease; CAD; coronary heart disease; CHD;  
 KW atherosclerosis; hepatic glucose production;  
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;  
 KW colon cancer; lung cancer; neurological disease; Huntington disease;  
 KW spinocerebellar ataxia; viral disease; AIDS; apolipoprotein B; apoB; ss.  
 OS Homo sapiens.  
 XX  
 XX WO2004080406-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 XX 08-MAR-2004; 2004WO-US007070.  
 XX  
 XX 07-MAR-2003; 2003US-0452682P.  
 XX PR 12-MAR-2003; 2003US-0454265P.  
 XX PR 13-MAR-2003; 2003US-0454962P.  
 XX PR 13-MAR-2003; 2003US-0455050P.  
 XX PR 14-APR-2003; 2003US-0462894P.  
 XX PR 17-APR-2003; 2003US-0463772P.  
 XX PR 25-APR-2003; 2003US-0465665P.  
 XX PR 25-APR-2003; 2003US-0465802P.  
 XX PR 09-MAY-2003; 2003US-0469612P.  
 XX PR 08-AUG-2003; 2003US-0493986P.  
 XX PR 11-AUG-2003; 2003US-0494597P.  
 XX PR 26-SEP-2003; 2003US-0506341P.  
 XX PR 09-OCT-2003; 2003US-0510246P.  
 XX PR 10-OCT-2003; 2003US-0510318P.  
 XX PR 07-NOV-2003; 2003US-0518453P.  
 XX  
 XX (ALNY-) ALNYLAM PHARM.  
 XX  
 XX Manoharan M, Bumcrot D;  
 XX  
 XX WPI; 2004-677362/66.  
 XX  
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery  
 XX PT disease, diabetes, cancer or neurological disease, comprises sense  
 XX PT sequence and antisense sequence which has specific modifications.  
 XX  
 XX Example 5; SEQ ID NO 866; 378pp; English.  
 XX  
 XX The invention describes a RNA interference (iRNA) agent (I) comprising a  
 XX CC sense sequence and an antisense sequence, where the sense sequences have  
 XX CC one or more asymmetrical 2'-O alkyl modifications, the antisense  
 XX CC sequences have one or more asymmetrical phosphorothioate modifications  
 XX CC and the antisense sequence targets a human gene sequence. Also described  
 XX CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100  
 XX CC levels or glucose-6-phosphatase levels in a subject; producing (I);  
 XX CC stabilising (I), involves selecting a sequence with activity and  
 XX CC introducing one or more asymmetrical modification in the sequence, where  
 XX CC the modification decreases nuclease sensitivity while not decreasing its  
 XX CC activity; a kit comprising (I) and instruction for its use; and a device  
 XX CC that can be dispense or administer a composition comprising (I). (I) is  
 XX CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)  
 XX CC The subject is suffering from a disorder characterised by elevated or  
 XX CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted  
 XX CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 XX CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 XX CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 XX CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 XX CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 XX CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 XX CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 XX CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 XX CC lung cancer), neurological disease (e.g., Huntington disease or  
 XX CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 XX CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 XX CC can be used to control ApoB gene expression.  
 XX  
 XX Sequence 19 BP; 4 A; 5 C; 5 G; 5 T; 0 U; 0 Other;  
 SQ



CC levels of cholesterol, and/or dysregulation of lipid metabolism. The  
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,  
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant  
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart  
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to  
 CC inhibit hepatic glucose production or for treating glucose-metabolism-  
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for  
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or  
 CC lung cancer), neurological disease (e.g., Huntington disease or  
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence  
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that  
 CC can be used to control ApoB gene expression.

XX  
 SQ Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14.4; DB 1; Length 19;  
 Best Local Similarity 93.8%; Pred. No. 2.1e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1582 TCAATCAGCTGTGCCA 1597  
 DB 16 TCAATCAGCTGTGCCA 1

RESULT 251  
 ADGL14097  
 ID ADGL14097 standard; DNA; 14 BP.  
 XX  
 AC ADGL14097;  
 XX  
 DT 26-FEB-2004 (first entry)  
 XX  
 DE Porcine reproductive and respiratory syndrome virus-related oligo 13.  
 XX  
 KW porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;  
 KW immunoprotective; vaccine; ISU-55;  
 KW porcine reproductive and respiratory disease; ss.  
 XX  
 OS Porcine reproductive and respiratory syndrome virus.  
 XX  
 PN WO9939582-A1.  
 XX  
 PD 12-AUG-1999.  
 XX  
 PF 08-FEB-1999; 99WO-US002630.  
 XX  
 PR 06-FEB-1998; 98US-00019793.  
 XX  
 PA (IOWA ) UNIV IOWA STATE RES FOUND INC.  
 PA (AMCY ) AMERICAN CYANAMID CO.  
 XX  
 PI Paul PS, Zhang Y;  
 XX  
 DR WPI; 1999-527293/44.  
 XX  
 PT Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) DNA sequences  
 PT and protein products.  
 XX  
 PS Example 8; Page 114; 214pp; English.  
 XX  
 CC DNA sequences encoding a porcine reproductive and respiratory syndrome  
 CC virus (PRRSV) is new. New DNA sequences comprise a 15424 or 15113 bp  
 CC sequence (isolates ISU-12 and ISU-55, respectively, (given in the  
 CC specification). The DNA sequences are designated as SEQ ID No. (ISU-12)  
 CC and SEQ ID No. (ISU-55). INDEPENDENT CLAIMS are also included for the  
 CC following: a DNA sequence encoding an open reading frame (ORF) of PRRSV  
 CC ISU-12 or ISU-55 as above; a polypeptide encoded by a DNA sequence as  
 CC above; a composition for inducing antibodies against PRRSV comprising one  
 CC or more polypeptides of (1); and distinguishing PRRSV strain ISU-55 from  
 CC other strains of PRRSV by: amplifying a DNA sequence of the PRRSV using  
 CC primers (55F) and (3RFLP); digesting the amplified sequence with DraI,  
 CC and correlating the presence of 3 restriction fragments of 626, 187 and  
 CC 135 bp with a PRRSV ISU-55 strain: 5'-CGTACGGCGATAGGCACACC-3' (55F) 5'-

CC GCATATATCATCATCTGGG-3' (3RFLP) Also disclosed are polypeptide sequences  
 CC of ORFs 2-5 of ISU-12 and ISU-55. These sequences comprise 256, 254, 178  
 CC and 200 amino acids, respectively (both isolates have identical length  
 CC polypeptides encoded by the respective ORFs). Preferred sequences: The  
 CC ORFs (1a, 1b and 2-7) of PRRSV ISU-12 comprise nucleotides 191-7367, 7375  
 CC -11757, 11762-12529, 12385-213116, 12930-13463, 13477-14077, 14064-14585  
 CC and 14578-14946 of the 15424 bp sequence. The ORFs (1a, 1b and 2-7) of  
 CC PRRSV ISU-55 comprise nucleotides 191-7699, 7687-12069, 12074-12841,  
 CC 12692-13458, 13212-13775, 13789-14388, 14376-14592 and 14890-15258 of the  
 CC 15113 bp sequence. Antiviral; Immunoprotective. None given. The vaccine  
 CC can be administered orally or parentally. Administration may be  
 CC intramuscularly, intradermally, intravenously, intraperitoneally,  
 CC subcutaneously or intranasally. All claimed. The ISU-55 polypeptides can  
 CC be used to induce antibodies against PRRSV effective to induce the  
 CC antibodies in a pig. Compositions comprising the ISU-55 polypeptides can  
 CC be used as vaccines to protect pigs from a porcine reproductive and  
 CC respiratory disease (claimed). ISU-55 polypeptides can be used to induce  
 CC antibodies in pigs. The lung lesions in 5-week old colostrum-deprived,  
 CC caesarian-derived pigs are reduced by a statistically significant amount,  
 CC where the significant amount is a p value less than 0.01, relative to  
 CC lung lesions in uninoculated 5-week old colostrum-deprived, caesarian-  
 CC derived pigs (claimed). None given.

XX  
 SQ Sequence 14 BP; 3 A; 3 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14; DB 1; Length 14;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 256 AGTGTGCGTCAACT 269  
 DB 1 AGTGTGCGTCAACT 14

RESULT 252  
 ADGL14100  
 ID ADGL14100 standard; DNA; 14 BP.  
 XX  
 AC ADGL14100;  
 XX  
 DT 26-FEB-2004 (first entry)  
 XX  
 DE Porcine reproductive and respiratory syndrome virus-related oligo 16.  
 XX  
 KW porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;  
 KW immunoprotective; vaccine; ISU-55;  
 KW porcine reproductive and respiratory disease; ss.  
 XX  
 OS Porcine reproductive and respiratory syndrome virus.  
 XX  
 PN WO9939582-A1.  
 XX  
 PD 12-AUG-1999.  
 XX  
 PF 08-FEB-1999; 99WO-US002630.  
 XX  
 PR 06-FEB-1998; 98US-00019793.  
 XX  
 PA (IOWA ) UNIV IOWA STATE RES FOUND INC.  
 PA (AMCY ) AMERICAN CYANAMID CO.  
 XX  
 PI Paul PS, Zhang Y;  
 XX  
 DR WPI; 1999-527293/44.  
 XX  
 PT Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) DNA sequences  
 PT and protein products.  
 XX  
 PS Example 8; Page 114; 214pp; English.  
 XX  
 CC DNA sequences encoding a porcine reproductive and respiratory syndrome  
 CC virus (PRRSV) is new. New DNA sequences comprise a 15424 or 15113 bp  
 CC sequence (isolates ISU-12 and ISU-55, respectively, (given in the  
 CC specification). The DNA sequences are designated as SEQ ID No. (ISU-12)  
 CC and SEQ ID No. (ISU-55). INDEPENDENT CLAIMS are also included for the  
 CC following: a DNA sequence encoding an open reading frame (ORF) of PRRSV  
 CC ISU-12 or ISU-55 as above; a polypeptide encoded by a DNA sequence as  
 CC above; a composition for inducing antibodies against PRRSV comprising one  
 CC or more polypeptides of (1); and distinguishing PRRSV strain ISU-55 from  
 CC other strains of PRRSV by: amplifying a DNA sequence of the PRRSV using  
 CC primers (55F) and (3RFLP); digesting the amplified sequence with DraI,  
 CC and correlating the presence of 3 restriction fragments of 626, 187 and  
 CC 135 bp with a PRRSV ISU-55 strain: 5'-CGTACGGCGATAGGCACACC-3' (55F) 5'-

CC specification). The DNA sequences are designated as SEQ ID No. (ISU-12)  
CC and SEQ ID No. (ISU-55). INDEPENDENT CLAIMS are also included for the  
CC following: a DNA sequence encoding an open reading frame (ORF) of PRRSV  
CC ISU-12 or ISU-55 as above; a polypeptide encoded by a DNA sequence as  
CC above; a composition for inducing antibodies against PRRSV comprising one  
CC or more polypeptides of (1); and distinguishing PRRSV strain ISU-55 from  
CC other strains of PRRSV by: amplifying a DNA sequence of the PRRSV using  
CC primers (55F) and (3RFLP); digesting the amplified sequence with DraI,  
CC and correlating the presence of 3 restriction fragments of 626, 187 and  
CC 135 bp with a PRRSV ISU-55 strain; 5'-CGTACGCGATAGGACAC-3' (55F) 5'-  
CC GGCATATATCACTGCG-3' (3RFLP) Also disclosed are polypeptide sequences  
CC of ORFs (1a, 1b and 2-7) of PRRSV ISU-12 comprising nucleotides 191-7387, 7375  
CC -11757, 11762-12529, 12385-213116, 12930-13463, 13477-14077, 14064-14585  
CC and 14578-14946 of the 15424 bp sequence. The ORFs (1a, 1b and 2-7) of  
CC PRRSV ISU-55 comprise nucleotides 191-7699, 7687-12069, 12074-12841,  
CC 12692-13458, 13212-13775, 13789-14388, 14376-14592 and 14890-15258 of the  
CC 15113 bp sequence. Antiviral; Immunoprotective. None given. The vaccine  
CC can be administered orally or parentally. Administration may be  
CC intramuscularly, intradermally, intravenously, intraperitoneally,  
CC subcutaneously or intranasally. All claimed. The ISU-55 polypeptides can  
CC be used to induce antibodies against PRRSV effective to induce the  
CC antibodies in a pig. Compositions comprising the ISU-55 polypeptides can  
CC be used as vaccines to protect pigs from a porcine reproductive and  
CC respiratory disease (claimed). ISU-55 polypeptides can be used to induce  
CC antibodies in pigs. The lung lesions in 5-week old colostrum-deprived,  
CC caesarian-derived pigs are reduced by a statistically significant amount,  
CC where the significant amount is a p value less than 0.01, relative to  
CC lung lesions in uninoculated 5-week old colostrum-deprived, caesarian-  
CC derived pigs (claimed). None given.

XX Sequence 14 BP; 3 A; 4 C; 2 G; 5 T; 0 U; 0 Other;

SQ Query Match 0.7%; Score 14; DB 1; Length 14;

Best Local Similarity 100.0%; Pred. No. 1.3e+02;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 372 CAACTGTTTATGCC 385

DB 1 CAACTGTTTATGCC 14

RESULT 253

ADG14103

ID ADG14103 standard; DNA; 14 BP.

XX ADG14103;

AC ADG14103;

XX 26-FEB-2004 (first entry)

DT 26-FEB-2004 (first entry)

XX Porcine reproductive and respiratory syndrome virus-related oligo 19.

DE Porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;

XX porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;

KW immunoprotective; vaccine; ISU-55;

KW porcine reproductive and respiratory disease; ss.

XX Porcine reproductive and respiratory syndrome virus.

OS Porcine reproductive and respiratory syndrome virus.

XX WO9939582-A1.

PN 12-AUG-1999.

XX 08-FEB-1999; 99WO-US002630.

XX 06-FEB-1998; 98US-00019793.

XX (IOWA ) UNIV IOWA STATE RES FOUND INC.

PA (AMCY ) AMERICAN CYANAMID CO.

XX Paul PS, Zhang Y;

XX

DR WPI; 1999-527293/44.

XX Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) DNA sequences  
PT and protein products.

XX Example 8; Page 114; 214pp; English.

XX DNA sequences encoding a porcine reproductive and respiratory syndrome  
CC virus (PRRSV) is new. New DNA sequences comprise a 15424 or 15113 bp  
CC sequence (isolates ISU-12 and ISU-55, respectively, given in the  
CC specification). The DNA sequences are designated as SEQ ID No. (ISU-12)  
CC and SEQ ID No. (ISU-55). INDEPENDENT CLAIMS are also included for the  
CC following: a DNA sequence encoding an open reading frame (ORF) of PRRSV  
CC ISU-12 or ISU-55 as above; a polypeptide encoded by a DNA sequence as  
CC above; a composition for inducing antibodies against PRRSV comprising one  
CC or more polypeptides of (1); and distinguishing PRRSV strain ISU-55 from  
CC other strains of PRRSV by: amplifying a DNA sequence of the PRRSV using  
CC primers (55F) and (3RFLP); digesting the amplified sequence with DraI,  
CC and correlating the presence of 3 restriction fragments of 626, 187 and  
CC 135 bp with a PRRSV ISU-55 strain; 5'-CGTACGCGATAGGACAC-3' (55F) 5'-  
CC GGCATATATCACTGCG-3' (3RFLP) Also disclosed are polypeptide sequences  
CC of ORFs (1a, 1b and 2-7) of PRRSV ISU-12 comprising nucleotides 191-7387,  
CC 7375 and 200 amino acids, respectively (both isolates have identical length  
CC polypeptides encoded by the respective ORFs). Preferred Sequences: The  
CC ORFs (1a, 1b and 2-7) of PRRSV ISU-12 comprise nucleotides 191-7387, 7375  
CC -11757, 11762-12529, 12385-213116, 12930-13463, 13477-14077, 14064-14585  
CC and 14578-14946 of the 15424 bp sequence. The ORFs (1a, 1b and 2-7) of  
CC PRRSV ISU-55 comprise nucleotides 191-7699, 7687-12069, 12074-12841,  
CC 12692-13458, 13212-13775, 13789-14388, 14376-14592 and 14890-15258 of the  
CC 15113 bp sequence. Antiviral; Immunoprotective. None given. The vaccine  
CC can be administered orally or parentally. Administration may be  
CC intramuscularly, intradermally, intravenously, intraperitoneally,  
CC subcutaneously or intranasally. All claimed. The ISU-55 polypeptides can  
CC be used to induce antibodies against PRRSV effective to induce the  
CC antibodies in a pig. Compositions comprising the ISU-55 polypeptides can  
CC be used as vaccines to protect pigs from a porcine reproductive and  
CC respiratory disease (claimed). ISU-55 polypeptides can be used to induce  
CC antibodies in pigs. The lung lesions in 5-week old colostrum-deprived,  
CC caesarian-derived pigs are reduced by a statistically significant amount,  
CC where the significant amount is a p value less than 0.01, relative to  
CC lung lesions in uninoculated 5-week old colostrum-deprived, caesarian-  
CC derived pigs (claimed). None given.

SQ Sequence 14 BP; 3 A; 7 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 14; DB 1; Length 14;

Best Local Similarity 100.0%; Pred. No. 1.3e+02;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 982 CTACCCCTGTAAACC 995

DB 1 CTACCCCTGTAAACC 14

RESULT 254

ADG14106

ID ADG14106 standard; DNA; 14 BP.

XX ADG14106;

AC ADG14106;

XX 26-FEB-2004 (first entry)

DT 26-FEB-2004 (first entry)

XX Porcine reproductive and respiratory syndrome virus-related oligo 22.

DE Porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;

XX porcine reproductive and respiratory syndrome virus; PRRSV; antiviral;

KW immunoprotective; vaccine; ISU-55;

KW porcine reproductive and respiratory disease; ss.

XX Porcine reproductive and respiratory syndrome virus.

OS Porcine reproductive and respiratory syndrome virus.

XX WO9939582-A1.

PN 12-AUG-1999.

XX

```
XX PF 08-FEB-1999; 99WO-US002630.
XX KW target; substrate; catalyst; modulation; expression; Raf gene; delivery;
XX KW screening; identification; synthesis; deprotection; purification; cancer;
XX KW inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;
XX KW restenosis; rheumatoid arthritis; ss.
XX OS Homo sapiens.
XX PN WO9850530-A2.
XX PD 12-NOV-1998.
XX PF 05-MAY-1998; 98WO-US009249.
XX PR 09-MAY-1997; 97US-0046059P.
XX PR 09-JUN-1997; 97US-0049002P.
XX PR 03-JUL-1997; 97US-0051718P.
XX PR 22-AUG-1997; 97US-0056808P.
XX PR 02-OCT-1997; 97US-0061321P.
XX PR 02-OCT-1997; 97US-0061324P.
XX PR 05-NOV-1997; 97US-0064866P.
XX PR 19-DEC-1997; 97US-0068212P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Jarvis T, Matulic-Adamic J, Reynolds M, Kisch K, Bellon L;
XX PI Parry T, Beigelman L, Mcswiggen JA, Karpelsky A, Burgin A;
XX PI Thompson J, Workman CT, Beaudry A, Sweedler D;
XX DR WPI; 1999-009494/01.
XX PT Identifying new catalytic nucleic acid that modulates selected processes
XX PT - especially ribozymes that cleave Raf RNA for treating cancer,
XX PT restenosis, and also new ribozymes and modified nucleoside triphosphates
XX PT used as antiviral agents and synthons.
XX PS Claim 177; Page 167; 259pp; English.
XX CC A method has been developed for the identification of a nucleic acid
XX CC capable of modulating a process in a biological system. The method
XX CC comprises: (a) introducing into the system a random library of nucleic
XX CC acid catalysts (NAC) having a substrate binding domain (SBD), comprising
XX CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC
XX CC in systems where modulation has occurred and/or determining the sequence
XX CC of at least part of the SBDs in such systems. Nucleic acid molecules with
XX CC endonuclease activity and catalytic activity, from the present invention,
XX CC are used to modulate gene expression in plant and mammalian cells and to
XX CC cleave target nucleic acid, particularly for treating systemic diseases
XX CC caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic
XX CC ascites and infection. They may also be used to detect genetic drift and
XX CC mutations in diseased cells and to determine c-raf RNA. Specifically NACs
XX CC with RNA-cleaving activity that modulate expression of the Raf gene, are
XX CC used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or
XX CC generally any condition associated with the level of c-raf. Introduction
XX CC of sugar/phosphate modifications increases stability against nuclease and
XX CC activity. AAV90922 to AAV93877 represent NACs that can be used in the
XX CC method, specifically for modulating the expression of a Raf gene
XX SQ Sequence 17 BP; 6 A; 1 C; 6 G; 0 T; 4 U; 0 Other;
Query Match 0.7%; Score 14; DB 1; Length 17;
Best Local Similarity 71.4%; Pred. No. 1.9e+02;
Matches 10; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 809 GAAGATTTCGATGT 822
DB 2 GAAGAAUUGCAUGU 15
RESULT 256
ABA78478
ID ABA78478 standard; DNA; 17 BP.
XX PF 08-FEB-1999; 99WO-US002630.
XX KW target; substrate; catalyst; modulation; expression; Raf gene; delivery;
XX KW screening; identification; synthesis; deprotection; purification; cancer;
XX KW inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;
XX KW restenosis; rheumatoid arthritis; ss.
XX OS Homo sapiens.
XX PN WO9850530-A2.
XX PD 12-NOV-1998.
XX PF 05-MAY-1998; 98WO-US009249.
XX PR 09-MAY-1997; 97US-0046059P.
XX PR 09-JUN-1997; 97US-0049002P.
XX PR 03-JUL-1997; 97US-0051718P.
XX PR 22-AUG-1997; 97US-0056808P.
XX PR 02-OCT-1997; 97US-0061321P.
XX PR 02-OCT-1997; 97US-0061324P.
XX PR 05-NOV-1997; 97US-0064866P.
XX PR 19-DEC-1997; 97US-0068212P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Jarvis T, Matulic-Adamic J, Reynolds M, Kisch K, Bellon L;
XX PI Parry T, Beigelman L, Mcswiggen JA, Karpelsky A, Burgin A;
XX PI Thompson J, Workman CT, Beaudry A, Sweedler D;
XX DR WPI; 1999-009494/01.
XX PT Identifying new catalytic nucleic acid that modulates selected processes
XX PT - especially ribozymes that cleave Raf RNA for treating cancer,
XX PT restenosis, and also new ribozymes and modified nucleoside triphosphates
XX PT used as antiviral agents and synthons.
XX PS Claim 177; Page 167; 259pp; English.
XX CC A method has been developed for the identification of a nucleic acid
XX CC capable of modulating a process in a biological system. The method
XX CC comprises: (a) introducing into the system a random library of nucleic
XX CC acid catalysts (NAC) having a substrate binding domain (SBD), comprising
XX CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC
XX CC in systems where modulation has occurred and/or determining the sequence
XX CC of at least part of the SBDs in such systems. Nucleic acid molecules with
XX CC endonuclease activity and catalytic activity, from the present invention,
XX CC are used to modulate gene expression in plant and mammalian cells and to
XX CC cleave target nucleic acid, particularly for treating systemic diseases
XX CC caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic
XX CC ascites and infection. They may also be used to detect genetic drift and
XX CC mutations in diseased cells and to determine c-raf RNA. Specifically NACs
XX CC with RNA-cleaving activity that modulate expression of the Raf gene, are
XX CC used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or
XX CC generally any condition associated with the level of c-raf. Introduction
XX CC of sugar/phosphate modifications increases stability against nuclease and
XX CC activity. AAV90922 to AAV93877 represent NACs that can be used in the
XX CC method, specifically for modulating the expression of a Raf gene
XX SQ Sequence 17 BP; 6 A; 1 C; 6 G; 0 T; 4 U; 0 Other;
Query Match 0.7%; Score 14; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1390 GGCAATGATAAC 1403
DB 1 GGCAATGATAAC 14
RESULT 255
AAV93386
ID AAV93386 standard; RNA; 17 BP.
XX AC AAV93386;
XX AC AAV93386;
XX DT 18-FEB-1999 (first entry)
XX DE Human B-raf substrate nucleotide position 723.
```

XX ABA78478;  
AC  
XX  
DT 24-JAN-2002 (first entry)  
XX  
DE CDKN2A mutation correcting oligonucleotide SEQ ID NO: 1324.  
XX  
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;  
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;  
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;  
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;  
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;  
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;  
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;  
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;  
KW Alzheimer's disease; cytosolic; antickling; antianaemic; haemostatic;  
KW antilipemic; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200173002-A2.  
XX  
PD 04-OCT-2001.  
XX  
PF 27-MAR-2001; 2001WO-US009761.  
XX  
PR 27-MAR-2000; 2000US-0192176P.  
PR 27-MAR-2000; 2000US-0192179P.  
PR 01-JUN-2000; 2000US-0208538P.  
PR 30-OCT-2000; 2000US-0244989P.  
XX  
PA (UYDE ) UNIV DELAWARE.  
XX  
XX Kmiec EB, Gamper HB, Rice MC;  
PI WPI; 2001-639230/73.  
XX  
DR Oligonucleotide for targeted alterations of genetic sequences and for  
PT treating cystic fibrosis, comprises at least one mismatch and chemical  
PT modification.  
XX  
PS Claim 7; Page 125; 294pp; English.  
XX  
CC The present invention provides single-stranded oligonucleotides which can  
CC be used for the targeted alteration of genomic sequences, where the  
CC oligonucleotide has at least one mismatch compared with the genomic  
CC sequence to be altered. In particular, these sequences are directed at  
CC the following genes: adenosine deaminase, p53, beta-globin,  
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A  
CC (CDKN2A), APC, Factor V, Factor VII, Factor IX, haemoglobin alpha locus  
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,  
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase  
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and  
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases  
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,  
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,  
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and  
CC various syndromes. The present sequence is one of the gene correcting  
CC oligonucleotides of the invention  
XX  
SQ Sequence 17 BP; 3 A; 7 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 14; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred.No.1.9e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1571 TGGCCAGCCAGTCA 1584  
|||||  
DB 1 TGGCCAGCCAGTCA 14

RESULT 257  
ABA78481/c

100 ABA78481 standard; DNA; 17 BP.  
AC ABA78481;  
XX  
DT 24-JAN-2002 (first entry)  
XX  
DE CDKN2A mutation correcting oligonucleotide SEQ ID NO: 1327.  
XX  
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;  
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;  
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;  
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;  
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;  
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;  
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;  
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;  
KW Alzheimer's disease; cytosolic; antickling; antianaemic; haemostatic;  
KW antilipemic; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200173002-A2.  
XX  
PD 04-OCT-2001.  
XX  
PF 27-MAR-2001; 2001WO-US009761.  
XX  
PR 27-MAR-2000; 2000US-0192176P.  
PR 27-MAR-2000; 2000US-0192179P.  
PR 01-JUN-2000; 2000US-0208538P.  
PR 30-OCT-2000; 2000US-0244989P.  
XX  
PA (UYDE ) UNIV DELAWARE.  
XX  
XX Kmiec EB, Gamper HB, Rice MC;  
PI WPI; 2001-639230/73.  
XX  
DR Oligonucleotide for targeted alterations of genetic sequences and for  
PT treating cystic fibrosis, comprises at least one mismatch and chemical  
PT modification.  
XX  
PS Claim 7; Page 125; 294pp; English.  
XX  
CC The present invention provides single-stranded oligonucleotides which can  
CC be used for the targeted alteration of genomic sequences, where the  
CC oligonucleotide has at least one mismatch compared with the genomic  
CC sequence to be altered. In particular, these sequences are directed at  
CC the following genes: adenosine deaminase, p53, beta-globin,  
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A  
CC (CDKN2A), APC, Factor V, Factor VII, Factor IX, haemoglobin alpha locus  
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,  
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase  
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and  
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases  
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,  
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,  
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and  
CC various syndromes. The present sequence is one of the gene correcting  
CC oligonucleotides of the invention  
XX  
SQ Sequence 17 BP; 2 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 14; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred.No.1.9e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1571 TGGCCAGCCAGTCA 1584  
|||||  
DB 14 TGGCCAGCCAGTCA 1

RESULT 258

```
ABR78482
ID ABA78482 standard; DNA; 17 BP.
XX AC
XX ABA78482;
XX DT
XX 24-JAN-2002 (first entry)
XX DE
XX CDKN2A mutation correcting oligonucleotide SEQ ID NO: 1328.
XX KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
XX KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
XX KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
XX KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
XX KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
XX KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
XX KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisenese;
XX KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
XX KW Alzheimer's disease; cytostatic; antitickling; antianaemic; haemostatic;
XX KW antilipemic; ss.
XX OS Homo sapiens.
XX PN WO200173002-A2.
XX PD 04-OCT-2001.
XX PF 27-MAR-2001; 2001WO-US009761.
XX PR 27-MAR-2000; 2000US-0192176P.
XX PR 27-MAR-2000; 2000US-0192179P.
XX PR 01-JUN-2000; 2000US-0208538P.
XX PR 30-OCT-2000; 2000US-0244989P.
XX PA (UYDE ) UNIV DELAWARE.
XX PI Kmiec EB, Gamper HB, Rice MC;
XX WI WIPI; 2001-639230/73.
XX DR
XX PT Oligonucleotide for targeted alterations of genetic sequences and for
XX PT treating cystic fibrosis, comprises at least one mismatch and chemical
XX PT modification.
XX PS Claim 7; Page 125; 294pp; English.
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XX CC be used for the targeted alteration of genomic sequences, where the
XX CC oligonucleotide has at least one mismatch compared with the genomic
XX CC sequence to be altered. In particular, these sequences are directed at
XX CC the following genes: adenosine deaminase, p53, beta-globin,
XX CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
XX CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
XX CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
XX CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
XX CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
XX CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
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XX CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
XX CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
XX CC various syndromes. The present sequence is one of the gene correcting
XX CC oligonucleotides of the invention
XX SQ Sequence 17 BP; 3 A; 7 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1571 TGGCCAGCCAGTCA 1584
DB 4 TGGCCAGCCAGTCA 17

RESULT 259
ABA78477/C
ID ABA78477 standard; DNA; 17 BP.
XX AC
XX ABA78477;
XX DT
XX 24-JAN-2002 (first entry)
XX DE
XX CDKN2A mutation correcting oligonucleotide SEQ ID NO: 1323.
XX KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
XX KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
XX KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
XX KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
XX KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
XX KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
XX KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisenese;
XX KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
XX KW Alzheimer's disease; cytostatic; antitickling; antianaemic; haemostatic;
XX KW antilipemic; ss.
XX OS Homo sapiens.
XX PN WO200173002-A2.
XX PD 04-OCT-2001.
XX PF 27-MAR-2001; 2001WO-US009761.
XX PR 27-MAR-2000; 2000US-0192176P.
XX PR 27-MAR-2000; 2000US-0192179P.
XX PR 01-JUN-2000; 2000US-0208538P.
XX PR 30-OCT-2000; 2000US-0244989P.
XX PA (UYDE ) UNIV DELAWARE.
XX PI Kmiec EB, Gamper HB, Rice MC;
XX WI WIPI; 2001-639230/73.
XX DR
XX PT Oligonucleotide for targeted alterations of genetic sequences and for
XX PT treating cystic fibrosis, comprises at least one mismatch and chemical
XX PT modification.
XX PS Claim 7; Page 125; 294pp; English.
XX CC The present invention provides single-stranded oligonucleotides which can
XX CC be used for the targeted alteration of genomic sequences, where the
XX CC oligonucleotide has at least one mismatch compared with the genomic
XX CC sequence to be altered. In particular, these sequences are directed at
XX CC the following genes: adenosine deaminase, p53, beta-globin,
XX CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
XX CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
XX CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
XX CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
XX CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
XX CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
XX CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
XX CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
XX CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
XX CC various syndromes. The present sequence is one of the gene correcting
XX CC oligonucleotides of the invention
XX SQ Sequence 17 BP; 2 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1571 TGGCCAGCCAGTCA 1584
DB 17 TGGCCAGCCAGTCA 4
```



XX MNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic; virucide; neuroprotective; antibacterial; replication; pancreatitis; encephalitis; myocarditis; meningitis; infection; hepatitis; liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme; Amberzyme; Zinzyme; ss.

OS West Nile Virus.

XX WO200268637-A2.

XX 06-SEP-2002.

XX 19-OCT-2001; 2001WO-US048350.

XX 20-OCT-2000; 2000US-0242411P.

XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MCSW/) MCSWIGGEN J A.

XX Blatt L, Mcswiggen JA;

XX WPI; 2002-706994/76.

XX New nucleic acid molecule that modulates replication of West Nile Virus (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.

XX Claim 23; SEQ ID NO 14340; 495pp; English.

XX The invention relates to nucleic acid molecules that modulate replication of the West Nile Virus (WNV). The nucleic acid molecules are useful for treating a condition related to WNV infection e.g. pancreatitis, encephalitis, myocarditis, meningitis, neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The nucleic acid molecules further comprise at least five ribose residues, at least ten 2'-O-methyl modifications, phosphorothioate linkages on at least three of the 5' terminal nucleotides and a 3' end modification of a 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080 are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid molecule of the invention

XX Sequence 17 BP; 1 A; 9 C; 1 G; 0 T; 6 U; 0 Other;

Query Match 0.7%; Score 14; DB 1; Length 17;  
Best Local Similarity 57.1%; Pred. No. 1.9e+02;  
Matches 8; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

OY 156 CCTCTGATCTTC 169  
|||::|::|::|::|  
Db 4 CCUCUGAUCUUC 17

RESULT 263

ACN10439

ID ACN10439 standard; RNA; 17 BP.

XX ACN10439;

XX 22-APR-2004 (first entry)

XX WNV minus strand Inozyme substrate SEQ ID NO 10442.

XX MNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic; virucide; neuroprotective; antibacterial; replication; pancreatitis; encephalitis; myocarditis; meningitis; infection; hepatitis; liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme; Amberzyme; Zinzyme; ss.

OS West Nile Virus.

XX WO200268637-A2.

XX 06-SEP-2002.

XX 19-OCT-2001; 2001WO-US048350.

XX 20-OCT-2000; 2000US-0242411P.

XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MCSW/) MCSWIGGEN J A.

XX Blatt L, Mcswiggen JA;

XX WPI; 2002-706994/76.

XX New nucleic acid molecule that modulates replication of West Nile Virus (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.

XX Claim 23; SEQ ID NO 10442; 495pp; English.

XX The invention relates to nucleic acid molecules that modulate replication of the West Nile Virus (WNV). The nucleic acid molecules are useful for treating a condition related to WNV infection e.g. pancreatitis, encephalitis, myocarditis, meningitis, neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The nucleic acid molecules further comprise at least five ribose residues, at least ten 2'-O-methyl modifications, phosphorothioate linkages on at least three of the 5' terminal nucleotides and a 3' end modification of a 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080 are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid molecule of the invention

XX Sequence 17 BP; 2 A; 5 C; 2 G; 0 T; 8 U; 0 Other;

Query Match 0.7%; Score 14; DB 1; Length 17;  
Best Local Similarity 57.1%; Pred. No. 1.9e+02;  
Matches 8; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

OY 850 CCAACTTCTTCG 863  
||||::|::|::|::|  
Db 4 CCACUUCUUCUG 17

RESULT 264

ACN05352/c

ID ACN05352 standard; RNA; 17 BP.

XX ACN05352;

XX 22-APR-2004 (first entry)

XX WNV DNazyme substrate SEQ ID NO 5355.

XX MNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic; virucide; neuroprotective; antibacterial; replication; pancreatitis; encephalitis; myocarditis; meningitis; infection; hepatitis; liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme; Amberzyme; Zinzyme; ss.

XX West Nile Virus.

XX WO200268637-A2.

XX 06-SEP-2002.

XX 19-OCT-2001; 2001WO-US048350.

```
XX 20-OCT-2000; 2000US-0242411P.
PR (RIBO-) RIBOZYME PHARM INC.
XX (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX Blatt L, Mcswiggen JA;
PI WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
XX (WNV), useful for treating a condition related to WNV infection e.g.
XX pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 5355; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
XX of the West Nile Virus (WNV). The nucleic acid molecules are useful for
XX treating a condition related to WNV infection e.g. pancreatitis,
XX encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
XX liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
XX molecule is selected from the group of ribozymes consisting of
XX Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
XX nucleic acid molecules further comprise at least five ribose residues, at
XX least ten 2'-O-methyl modifications, phosphorothioate linkages on at
XX least three of the 5' terminal nucleotides and a 3' end modification of a
XX 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
XX are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
XX in the specification. The present sequence is that of a nucleic acid
XX molecule of the invention
XX
XX Sequence 17 BP; 7 A; 2 C; 7 G; 0 T; 1 U; 0 Other;
SQ
Query Match 0.7%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 156 CCTCTGATCTTCTC 169
DB |||||
16 CCTCTGATCTTCTC 3
RESULT 265
ACN13691
ID ACN13691 standard; RNA; 17 BP.
XX
XX ACN13691;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV minus strand DNazyme substrate SEQ ID NO 13694.
XX
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
XX virucide; neuroprotective; antibacterial; replication; pancreatitis;
XX encephalitis; myocarditis; meningitis; infection; hepatitis;
XX liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
XX Amberzyme; Zinzyme; ss.
XX
XX West Nile Virus.
XX
XX WO200268637-A2.
XX
XX 06-SEP-2002.
XX
XX 19-OCT-2001; 2001WO-US048350.
XX
XX 20-OCT-2000; 2000US-0242411P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (BLAT/) BLATT L.
XX (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
PI WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
XX (WNV), useful for treating a condition related to WNV infection e.g.
XX pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 5355; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
XX of the West Nile Virus (WNV). The nucleic acid molecules are useful for
XX treating a condition related to WNV infection e.g. pancreatitis,
XX encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
XX liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
XX molecule is selected from the group of ribozymes consisting of
XX Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
XX nucleic acid molecules further comprise at least five ribose residues, at
XX least ten 2'-O-methyl modifications, phosphorothioate linkages on at
XX least three of the 5' terminal nucleotides and a 3' end modification of a
XX 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
XX are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
XX in the specification. The present sequence is that of a nucleic acid
XX molecule of the invention
XX
XX Sequence 17 BP; 7 A; 2 C; 7 G; 0 T; 1 U; 0 Other;
SQ
Query Match 0.7%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 156 CCTCTGATCTTCTC 169
DB |||||
16 CCTCTGATCTTCTC 3
RESULT 266
ACN08123
ID ACN08123 standard; RNA; 17 BP.
XX
XX ACN08123;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV minus strand Hammerhead Ribozyme substrate SEQ ID NO 8126.
XX
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
XX virucide; neuroprotective; antibacterial; replication; pancreatitis;
XX encephalitis; myocarditis; meningitis; infection; hepatitis;
XX liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
XX Amberzyme; Zinzyme; ss.
XX
XX West Nile Virus.
XX
XX WO200268637-A2.
XX
XX 06-SEP-2002.
XX
XX 19-OCT-2001; 2001WO-US048350.
XX
XX 20-OCT-2000; 2000US-0242411P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (BLAT/) BLATT L.
XX (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
PI WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
XX (WNV), useful for treating a condition related to WNV infection e.g.
XX pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
```



XX  
PS Claim 23; SEQ ID NO 8126; 495pp; English.

CC The invention relates to nucleic acid molecules that modulate replication  
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for  
CC treating a condition related to WNV infection e.g. pancreatitis,  
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,  
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid  
CC molecule is selected from the group of ribozymes consisting of  
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The  
CC nucleic acid molecules further comprise at least five ribose residues, at  
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
CC least three of the 5' terminal nucleotides and a 3' end modification of a  
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
CC in the specification. The present sequence is that of a nucleic acid  
CC molecule of the invention

XX  
SQ Sequence 17 BP; 2 A; 6 C; 2 G; 0 T; 7 U; 0 Other;

Query Match 0.7%; Score 14; DB 1; Length 17;  
Best Local Similarity 57.1%; Pred. No. 1.9e+02;  
Matches 8; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

QY 850 CCACCTTCTCTCTG 863  
DB 3 CCACCUUCUUCUG 16  
|||||:::|:::|

RESULT 267

ACN07694  
ID ACN07694 standard; RNA; 17 BP.

XX  
AC ACN07694;

XX  
DT 22-APR-2004 (first entry)

XX  
DE WNV minus strand Hammerhead Ribozyme substrate SEQ ID NO 7697.

XX  
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
KW viricide; neuroprotective; antibacterial; replication; pancreatitis;  
KW encephalitis; myocarditis; meningitis; infection; hepatitis;  
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;  
KW Amberzyme; Zinzyme; ss.

XX  
OS West Nile Virus.

XX  
PN WO200268637-A2.

XX  
PD 06-SEP-2002.

XX  
PF 19-OCT-2001; 2001WO-US048350.

XX  
PR 20-OCT-2000; 2000US-024241P.

XX  
PA (RIBO-) RIBOZYME PHARM INC.

XX  
PA (BLAT/) BLATT L.

XX  
PA (MCSW/) MCSWIGGEN J A.

XX  
PI Blatt L, Mcswiggen JA;

XX  
DR WPI; 2002-706994/76.

XX  
PT New nucleic acid molecule that modulates replication of West Nile Virus  
PT (WNV), useful for treating a condition related to WNV infection e.g.  
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.

XX  
PS Claim 23; SEQ ID NO 7697; 495pp; English.

XX  
CC The invention relates to nucleic acid molecules that modulate replication  
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for  
CC treating a condition related to WNV infection e.g. pancreatitis,  
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,  
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid  
CC molecule is selected from the group of ribozymes consisting of  
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The  
CC nucleic acid molecules further comprise at least five ribose residues, at  
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
CC least three of the 5' terminal nucleotides and a 3' end modification of a  
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
CC in the specification. The present sequence is that of a nucleic acid  
CC molecule of the invention

CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid  
CC molecule is selected from the group of ribozymes consisting of  
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The  
CC nucleic acid molecules further comprise at least five ribose residues, at  
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
CC least three of the 5' terminal nucleotides and a 3' end modification of a  
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
CC in the specification. The present sequence is that of a nucleic acid  
CC molecule of the invention

XX  
SQ Sequence 17 BP; 1 A; 6 C; 3 G; 0 T; 7 U; 0 Other;

Query Match 0.7%; Score 14; DB 1; Length 17;  
Best Local Similarity 57.1%; Pred. No. 1.9e+02;  
Matches 8; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

QY 156 CCTCTGATCTTCTC 169  
DB 1 CCUCUGAUCUUCUC 14  
|||||:::|:::|

RESULT 268

ACN01234/C  
ID ACN01234 standard; RNA; 17 BP.

XX  
AC ACN01234;

XX  
DT 22-APR-2004 (first entry)

XX  
DE WNV Hammerhead Ribozyme substrate SEQ ID NO 1224.

XX  
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
KW viricide; neuroprotective; antibacterial; replication; pancreatitis;  
KW encephalitis; myocarditis; meningitis; infection; hepatitis;  
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;  
KW Amberzyme; Zinzyme; ss.

XX  
OS West Nile Virus.

XX  
PN WO200268637-A2.

XX  
PD 06-SEP-2002.

XX  
PF 19-OCT-2001; 2001WO-US048350.

XX  
PR 20-OCT-2000; 2000US-024241P.

XX  
PA (RIBO-) RIBOZYME PHARM INC.

XX  
PA (BLAT/) BLATT L.

XX  
PA (MCSW/) MCSWIGGEN J A.

XX  
PI Blatt L, Mcswiggen JA;

XX  
DR WPI; 2002-706994/76.

XX  
PT New nucleic acid molecule that modulates replication of West Nile Virus  
PT (WNV), useful for treating a condition related to WNV infection e.g.  
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.

XX  
PS Claim 23; SEQ ID NO 1224; 495pp; English.

XX  
CC The invention relates to nucleic acid molecules that modulate replication  
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for  
CC treating a condition related to WNV infection e.g. pancreatitis,  
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,  
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid  
CC molecule is selected from the group of ribozymes consisting of  
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The  
CC nucleic acid molecules further comprise at least five ribose residues, at  
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
CC least three of the 5' terminal nucleotides and a 3' end modification of a  
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
CC in the specification. The present sequence is that of a nucleic acid  
CC molecule of the invention

CC are claimed; however, SRQ ID NO 2194-2206 and 17502-17514 are not given  
CC in the specification. The present sequence is that of a nucleic acid  
CC molecule of the invention  
XX  
SQ Sequence 17 BP; 6 A; 1 C; 9 G; 0 T; 1 U; 0 Other;  
Query Match 0.7%; Score 14; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 1.9e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 156 CCTCTGATCTTCTC 169  
Db 14 CCTCTGATCTTCTC 1  
RESULT 269  
AAD56453/c  
ID AAD56453 standard; DNA; 17 BP.  
XX  
AC AAD56453;  
XX  
DT 07-AUG-2003 (first entry)  
XX  
DE 2'-P-ANA antisense oligo #8, to elicit RNase H degradation of target RNA.  
XX  
KW Acyclic linker; gene expression; gene therapy; ribonuclease; RNase H;  
KW antisense; ss.  
XX  
OS Unidentified.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..2  
FT /tag= a  
FT /mod\_base= OTHER  
FT /note= "2'-deoxy-2'-fluoroarabinothymidine"  
FT modified\_base 3  
FT /tag= b  
FT /mod\_base= OTHER  
FT /note= "2'-deoxy-2'-fluoroarabinoadenosine"  
FT modified\_base 4  
FT /tag= c  
FT /mod\_base= OTHER  
FT /note= "2'-deoxy-2'-fluoroarabinothymidine"  
FT modified\_base 5  
FT /tag= d  
FT /mod\_base= OTHER  
FT /note= "2'-deoxy-2'-fluoroarabinoadenosine"  
FT modified\_base 6..9  
FT /tag= e  
FT /mod\_base= OTHER  
FT /note= "2'-deoxy-2'-fluoroarabinothymidine"  
FT misc\_feature 9..10  
FT /tag= f  
FT /note= "Bases 9 and 10 are linked by butanediol linker  
FT which is represented as B in page 49 and X in page 54 and  
FT 64 of the specification"  
FT modified\_base 10  
FT /tag= g  
FT /mod\_base= OTHER  
FT /note= "2'-deoxy-2'-fluoroarabinothymidine"  
FT modified\_base 11  
FT /tag= h  
FT /mod\_base= OTHER  
FT /note= "2'-deoxy-2'-fluoroarabincytidine"  
FT modified\_base 12..14  
FT /tag= i  
FT /mod\_base= OTHER  
FT /note= "2'-deoxy-2'-fluoroarabinothymidine"  
FT modified\_base 15..17  
FT /tag= j  
FT /mod\_base= OTHER  
FT /note= "2'-deoxy-2'-fluoroarabincytidine"  
XX

PN WO2003037909-A1.  
XX  
PD 08-MAY-2003.  
XX  
PF 29-OCT-2002; 2002WO-CA001628.  
XX  
PR 29-OCT-2001; 2001US-0330719P.  
XX  
PA (UYMC-) UNIV MCGILL.  
XX  
PI Damha MJ, Viazovkina E, Mangos MM, Parniak MA, Min K;  
XX  
DR WPI; 2003-421516/39.  
XX  
XX  
PT Novel acyclic linker-containing oligonucleotide useful for preventing or  
PT decreasing translation, reverse transcription and/or replication of a  
PT target RNA in a system, comprises a modified deoxyribonucleotide.  
XX  
PS Example 2; Page 49; 104pp; English.  
XX  
CC The invention relates to an acyclic linker-containing oligonucleotide  
CC comprising at least one modified deoxyribonucleotide. Oligonucleotides of  
CC the invention are useful for preventing or decreasing translation,  
CC reverse transcription and/or replication of a target RNA in a system.  
CC They are useful for selectively preventing gene expression in a sequence-  
CC specific manner, for hybridising to complementary RNA such as cellular  
CC mRNA or viral RNA, to hybridise to and induce cleavage of complementary  
CC RNA. They are also useful therapeutically in formulations or medicaments  
CC to prevent or treat a disease characterised by the expression of a  
CC particular target RNA. The invention is used in gene therapy. The present  
CC sequence is an antisense oligo used to elicit human RNase (ribonuclease)  
CC H degradation of target RNA. This sequence is used in the exemplification  
CC of the invention  
XX  
SQ Sequence 17 BP; 2 A; 4 C; 0 G; 11 T; 0 U; 0 Other;  
Query Match 0.7%; Score 14; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 1.9e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 1649 GCGAAAGAAAAATA 1662  
Db 17 GCGAAAGAAAAATA 4  
RESULT 270  
AAD56443/c  
ID AAD56443 standard; DNA; 17 BP.  
XX  
AC AAD56443;  
XX  
DT 07-AUG-2003 (first entry)  
XX  
DE CAT antisense oligo #2, to elicit RNase H degradation of target RNA.  
XX  
KW Acyclic linker; gene expression; gene therapy; ribonuclease; RNase H;  
KW antisense; ss.  
XX  
OS Unidentified.  
XX  
FH Key Location/Qualifiers  
FT misc\_feature 9..10  
FT /tag= a  
FT /note= "Bases 9 and 10 are linked by a butanediol linker  
FT which is represented as B in page 49 and X in page 60,  
FT Fig 3 and 4 of the specification"  
XX  
PN WO2003037909-A1.  
XX  
PD 08-MAY-2003.  
XX  
PF 29-OCT-2002; 2002WO-CA001628.  
XX

```

PR 29-OCT-2001; 2001US-0330719P.
XX (UYMC-) UNIV MCGILL.
XX Damha MJ, Viazovkina E, Mangos MM, Parniak MA, Min K;
XX WPI; 2003-421516/39.
XX
XX Novel acyclic linker-containing oligonucleotide useful for preventing or
XX decreasing translation, reverse transcription and/or replication of a
XX target RNA in a system, comprises a modified deoxyribonucleotide.
XX
XX Example 2; Fig 3; 104pp; English.
XX
XX The invention relates to an acyclic linker-containing oligonucleotide
XX comprising at least one modified deoxyribonucleotide. Oligonucleotides of
XX the invention are useful for preventing or decreasing translation,
XX reverse transcription and/or replication of a target RNA in a system.
XX They are useful for selectively preventing gene expression in a sequence-
XX specific manner, for hybridising to complementary RNA such as cellular
XX mRNA or viral RNA, to hybridise to and induce cleavage of complementary
XX RNA. They are also useful therapeutically in formulations or medicaments
XX to prevent or treat a disease characterised by the expression of a
XX particular target RNA. The invention is used in gene therapy. The present
XX sequence is an antisense oligo used to elicit human RNase (ribonuclease)
XX H degradation of target RNA. This sequence is used in the exemplification
XX of the invention
XX
XX Sequence 17 BP; 2 A; 4 C; 0 G; 11 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1649 GCGAAGAAAAATA 1662
Db |||||
17 GCGAAGAAAAATA 4
XX
RESULT 271
ADP46090
ID ADP46090 standard; DNA; 17 BP.
XX
AC ADP46090;
XX
XX 26-AUG-2004 (first entry)
XX
XX Extend primer 62 used to genotype human MAP kinase MAPK10 polymorphism.
XX
XX breast cancer; cytostatic; gene therapy; human; ss; primer; PCR; SNP;
XX single nucleotide polymorphism; MAP kinase; MAPK10; JNK3; p493F12;
XX p54bSAPK MAP kinase; c-Jun kinase 3; JNK3 alpha protein kinase;
XX c-Jun N-terminal kinase 3; stress activated protein kinase beta;
XX Chromosome 4q22.1-q23; probe.
XX
XX Homo sapiens.
XX
XX WO2004047623-A2.
XX
XX 10-JUN-2004.
XX
XX 25-NOV-2003; 2003WO-US037948.
XX
XX 25-NOV-2002; 2002US-0429136P.
XX
XX 24-JUL-2003; 2003US-0490234P.
XX
XX (SEQU-) SEQUENOM INC.
XX
XX Roth RB, Nelson MR, Braun A, Kammerer SM, Reneland R;
XX WPI; 2004-441051/41.
XX
XX Identifying a subject at risk of breast cancer by detecting the presence
XX
of polymorphic variations in the ICAM, MAPK10, KIAA0861, NPM1 or GALE
regions which are associated with breast cancer in a nucleic acid sample
from a subject.
XX
XX Example 5; Page 93; 289pp; English.
XX
XX The invention relates to a novel method for identifying a subject at risk
XX of breast cancer comprising detecting the presence or absence of one or
XX more polymorphic variations associated with breast cancer in a nucleic
XX acid sample from a subject. The method of the invention has cytostatic
XX applications and may be useful for identifying a subject at risk of
XX breast cancer, for early diagnosis, prevention and treatment of breast
XX cancer, possibly via gene therapy, as well as to analyse and predict a
XX response to a breast cancer treatment and in clinical drug trials. The
XX current sequence is that of an Extend primer (also described as probe) of
XX the invention which was used to genotype human MAP kinase MAPK10 (JNK3;
XX JNK3A; p493F12; p54bSAPK MAP kinase; c-Jun kinase 3; JNK3 alpha protein
XX kinase; c-Jun N-terminal kinase 3; stress activated protein kinase beta)
XX gDNA which has been mapped to chromosomal position 4q22.1-q23.
XX
XX Sequence 17 BP; 2 A; 4 C; 5 G; 6 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 27 TCAGTTGCCTTAGG 40
Db |||||
4 TCAGTTGCCTTAGG 17
XX
RESULT 272
AAT50604
ID AAT50604 standard; RNA; 18 BP.
XX
AC AAT50604;
XX
XX 10-MAR-1997 (first entry)
XX
XX Human CERP hairpin ribozyme target sequence #276.
XX
XX Hairpin ribozyme; cholesterol ester transfer protein; mRNA cleavage;
XX neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
XX reverse cholesterol transport; high density lipoprotein; therapy; CERP;
XX familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
XX peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
XX angioplastic restenosis; low density lipoprotein; diabetes; HDL; human;
XX LDL; ss.
XX
XX Homo sapiens.
XX
XX WO9620279-A1.
XX
XX 04-JUL-1996.
XX
XX 11-DEC-1995; 95WO-US016000.
XX
XX 23-DEC-1994; 94US-00363240.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (WARN ) WARNER LAMBERT CO.
XX
XX Couture L, Stinchcomb D, Mcswiggen J, Bisgaier C, Page M;
XX WPI; 1996-321852/32.
XX
XX New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA -
XX useful for preventing or treating initial development, progression or
XX regression of vascular diseases, esp. familial hypercholesterolaemia.
XX
XX Claim 4; Page 52; 72pp; English.
XX
XX AAT50595-T50642 represent target sequences for the human cholesterol
XX

```

ester transfer protein (CETP) hairpin ribozymes (see AAT50547-T50594).  
 CETP is a 74 kD glycoprotein that facilitates neutral lipid transfer  
 between plasma lipoproteins. The numbering of the targets refers to the  
 position of the cleavage site in full length CETP. The ribozyme then  
 binds to 4-6 nucleotides 5', and a variable number 3' of this site. The  
 ribozymes are able to cleave mRNA from the gene encoding CETP, thereby  
 blocking synthesis and/or expression of the mRNA. By inhibiting CETP, the  
 reverse cholesterol transport (RCT) pathway can be inhibited (or  
 eliminated) thereby preventing the reduction in size density of the high  
 density lipoproteins (HDL), prolonging HDL half life, and therefore  
 increasing HDL levels. The ribozymes can be used to treat conditions  
 associated with abnormal levels of CETP, specifically atherosclerosis,  
 peripheral vascular disease, hyperbetalipoproteinaemia, dyslipidaemia,  
 familial hypercholesterolaemia, hypovalipoproteinaemia, vascular  
 complications of diabetes, transplant, atherectomy and angioplastic  
 restenosis. By inhibiting CETP, the levels of HDL and low density  
 lipoproteins (LDL), and the HDL:LDL ratio are favourably altered (a  
 decrease in LDL levels, and a corresponding increase in HDL levels). The  
 ribozymes can also be used diagnostically to study genetic drift and  
 mutations in diseased cells, and to detect CETP mRNA. As the ribozymes  
 target specific regions of the CETP gene, they have low non-specific  
 activity

XX  
 SQ Sequence 18 BP; 3 A; 8 C; 3 G; 0 T; 4 U; 0 Other;

Query Match 0.7%; Score 14; DB 1; Length 18;  
 Best Local Similarity 78.6%; Pred. No. 2.2e+02;  
 Matches 11; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1761 ATCCAGACCGCCTT 1774  
 |:|||||||:|:  
 Db 3 AUCCAGACCGCCUU 16

RESULT 273  
 AAT92041/C  
 ID AAT92041 standard; DNA; 18 BP.  
 AC AAT92041;  
 XX  
 XX  
 DT 15-JAN-1998 (first entry)  
 XX  
 DE Sense primer derived from tRNA-His for endogenous retroviruses.  
 XX  
 KW Human; genome; transfer RNA; tRNA; pseudogene; primer; retrovirus;  
 KW reverse transcriptase; detection; endogenous; animal; evolution;  
 KW breeding programme; forensic science; primer; PCR; amplification;  
 KW polymerase chain reaction; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9709452-A1.  
 XX  
 PD 13-MAR-1997.  
 XX  
 PF 06-SEP-1996; 96WO-GB002196.  
 XX  
 PR 06-SEP-1995; 95GB-00018154.  
 XX  
 PA (UYCA-) UNIV CAMBRIDGE TECH SERVICES LTD.  
 XX  
 PI Petrik J;  
 XX  
 DR WPI; 1997-192926/17.  
 XX  
 PT Detecting retroviral DNA using labelled oligo:nucleotide(s) - which bind  
 to the primer binding site of a retroviral genome, useful as sequence  
 tag.  
 XX  
 PS Claim 2; Page 27; 39pp; English.  
 XX  
 CC The human genome is thought to contain around 1300 transfer RNA (tRNA)  
 genes and pseudogenes encoding 60-90 tRNAs. Of these, 20 have been  
 sequenced and 11 tRNA sequences have been shown to act as primers for  
 synthesising the (-)-strand of retroviruses by reverse transcriptase. The  
 oligonucleotides AAT92001-24 are derived from the 3' ends of tRNA genes  
 and are used to detect novel retroviruses or endogenous retroviral  
 sequences found in the human genome, by binding to the conserved primer  
 binding sites (PBS) found in retroviral genomes. This oligonucleotide is  
 derived from the 18 nucleotides at the 3' end of the tRNA-His sequence.  
 Endogenous retroviral sequences may serve as useful tags in animal  
 evolutionary studies and breeding programmes and, potentially, in  
 forensic sciences

CC sequenced and 11 tRNA sequences have been shown to act as primers for  
 synthesising the (-)-strand of retroviruses by reverse transcriptase.  
 CC Sequences AAT92025-48 are sense primers identical to primer binding site  
 CC (PBS) sequences found in retroviral sequence, which are complementary to  
 CC the last 18 nucleotides of tRNA gene sequences. This sequence is derived  
 CC from the tRNA-His sequence. The primers are used to amplify sequences  
 CC from known exogenous or endogenous retroviral sequences. They may also be  
 CC used to detect novel retroviruses or endogenous retroviral sequences  
 CC found in the human genomes. Endogenous retroviral sequences may serve as  
 CC useful tags in animal evolutionary studies and breeding programmes and,  
 CC potentially, in forensic sciences

XX  
 SQ Sequence 18 BP; 2 A; 3 C; 6 G; 5 T; 0 U; 2 Other;

Query Match 0.7%; Score 14; DB 1; Length 18;  
 Best Local Similarity 77.8%; Pred. No. 2.2e+02;  
 Matches 14; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 1869 ATCCCGTCACAGCATCA 1886  
 |||:|||||:|:  
 Db 18 ATCYGAGTCACRGACCA 1

RESULT 274  
 AAT92017  
 ID AAT92017 standard; DNA; 18 BP.  
 XX  
 AC AAT92017;  
 XX  
 DT 15-JAN-1998 (first entry)  
 XX  
 DE Capture probe derived from tRNA-His for endogenous retroviruses.  
 XX  
 KW Human; genome; transfer RNA; tRNA; pseudogene; primer; retrovirus;  
 KW reverse transcriptase; detection; endogenous; animal; evolution;  
 KW breeding programme; forensic science; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9709452-A1.  
 XX  
 PD 13-MAR-1997.  
 XX  
 PF 06-SEP-1996; 96WO-GB002196.  
 XX  
 PR 06-SEP-1995; 95GB-00018154.  
 XX  
 PA (UYCA-) UNIV CAMBRIDGE TECH SERVICES LTD.  
 XX  
 PI Petrik J;  
 XX  
 DR WPI; 1997-192926/17.  
 XX  
 PT Detecting retroviral DNA using labelled oligo:nucleotide(s) - which bind  
 to the primer binding site of a retroviral genome, useful as sequence  
 tag.  
 XX  
 PS Claim 2; Page 20; 39pp; English.  
 XX  
 CC The human genome is thought to contain around 1300 transfer RNA (tRNA)  
 genes and pseudogenes encoding 60-90 tRNAs. Of these, 20 have been  
 sequenced and 11 tRNA sequences have been shown to act as primers for  
 synthesising the (-)-strand of retroviruses by reverse transcriptase. The  
 oligonucleotides AAT92001-24 are derived from the 3' ends of tRNA genes  
 and are used to detect novel retroviruses or endogenous retroviral  
 sequences found in the human genome, by binding to the conserved primer  
 binding sites (PBS) found in retroviral genomes. This oligonucleotide is  
 derived from the 18 nucleotides at the 3' end of the tRNA-His sequence.  
 Endogenous retroviral sequences may serve as useful tags in animal  
 evolutionary studies and breeding programmes and, potentially, in  
 forensic sciences

XX  
 SQ Sequence 18 BP; 5 A; 6 C; 3 G; 2 T; 0 U; 2 Other;

```
Query Match      0.7%; Score 14; DB 1; Length 18;
Best Local Similarity 77.8%; Pred. No. 2.2e+02;
Matches 14; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 1869 ATCCGGGTACACATCA 1886
DB 1 ATCYGAGTCACGACCA 18

RESULT 275
AAT68368/c
ID AAT68368 standard; DNA; 18 BP.
XX
AC AAT68368;
XX
DT 11-AUG-1997 (first entry)
XX
DE Loci-specific primer for assessing integrity of human Y chromosome.
XX
KW Y chromosome; integrity; chromosome locus; primer; amplification; PCR;
KW polymerase chain reaction; fertility; azoospermia; oligospermia;
KW infertile; diagnosis; DYS209; DYS4351; DYS210; DYS333; DYS1; SMCK;
KW DAZ(1); DYS218; DYS219; DYS212; DYS351; DYS205; DYS281; MIC2; DYS201;
KW DYS241; DYS198; SR; DYS197; DYS196; DYS240; DYS271; DYS221; KAL182;
KW DAZ(2); DYS224; DYS226; DYS227; DYS229; DYS21; DYS230; DAZ(3);
KW DAZ(4); DAZ(5); SMCY; DYS217; DYS220; DYS223; DYS7; DYS237; DYS215; DYS7;
KW DYS237; DAZ(6); DAZ(7); DAZ(8); DAZ(9); DAZ(10); DAZ(11); YRRM1; ZFY;
KW BKM; ss.
XX
OS Homo sapiens.
XX
PN WO9641007-A1.
XX
PD 19-DEC-1996.
XX
PF 06-JUN-1996; 96WO-US009421.
XX
PR 07-JUN-1995; 95US-00472416.
PR 18-SEP-1995; 95US-00531556.
XX
PA (PROM-) PROMEGA CORP.
XX
PI First MK, Agoulnik AI, Muallem A;
XX
DR WPI; 1997-099942/09.
XX
PT Assessing integrity of Y chromosome - by amplification of selected human
PT chromosome loci by multiplex PCR and comparison with normal control DNA.
XX
PS Claim 2; Page 80; 11pp; English.
XX
CC AAT68355-T68368 are a set of primers used in a method for assessing the
CC integrity of a Y chromosome. The primers are capable of priming the
CC chromosome loci: DYS351, DYS229, DYZ1, DYS230, DAZ(3), DAZ(4), DAZ(5)
CC and MIC2. The method can be used to rapidly and reproducibly assess the
CC integrity of specific regions of the Y chromosome that are associated
CC with male fertility. It can be used to assess the integrity of the Y
CC chromosome in males exhibiting azoospermia or oligospermia (no or very
CC little spermatozoa in the semen) or to assess the genotype of infants of
CC phenotypically ambiguous sexuality. The method can also be used in
CC diagnosis and quality control (kits are provided within the scope of the
CC invention)
XX
SQ Sequence 18 BP; 2 A; 11 C; 0 G; 5 T; 0 U; 0 Other;

Query Match      0.7%; Score 14; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1560 AAGAGGGGGATCG 1573
DB 17 AAGAGGGGGATCG 4

RESULT 277
```

AAZ92565/c  
 ID AAZ92565 standard; DNA; 18 BP.  
 AC AAZ92565;  
 XX  
 DT 05-JUN-2000 (first entry)  
 XX  
 DE Human Y-specific STS PCR primer, SEQ ID NO:81.  
 XX  
 KW DAZ gene; chromosome Y; male infertility; sperm count; diagnosis;  
 KW sequence-tagged site; STS; treatment; gene therapy; PCR primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN US6020476-A.  
 XX  
 PD 01-FEB-2000.  
 XX  
 PF 30-OCT-1996; 96US-00742185.  
 XX  
 PR 22-SEP-1994; 94US-00310429.  
 PR 31-JUL-1996; 96US-00690734.  
 XX  
 PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.  
 XX  
 PI Hawkins T, Reeve MP, Saxena R, Page DC, Reijo R;  
 XX  
 DR WPI; 2000-181393/16.  
 XX  
 PT New nucleic acid, useful for diagnosis and treatment of reduced sperm  
 PT count, is derived from the human DAZ or DAZH genes.  
 XX  
 PS Claim 12; Col 17-18; 110pp; English.  
 XX  
 CC The invention relates to a family of human genes referred to as the DAZ  
 CC gene family, and to a functional DAZ homologue, DAZH. Members of the DAZ  
 CC gene family are clustered in the same region of the Y chromosome. In  
 CC particular, the invention relates to an isolated DAZ gene (AAZ92499)  
 CC present in interval 6D and/or 6E of the distal portion of Yq mutations  
 CC in which are associated with reduced sperm count. The DAZH gene  
 CC (AAZ92580) is located on chromosome 3; however, the entire DAZ gene  
 CC family, including DAZH is expressed in germ cells. DAZ and DAZH  
 CC nucleotide sequences may be used as a source of primers and probes for  
 CC the diagnosis of cases of reduced sperm count associated with alteration  
 CC or deletion of the DAZ gene. They are also used as human chromosome Y  
 CC markers. Functional DAZ genes can be used in gene therapy for treating  
 CC reduced sperm counts. Sequences AAZ92502-292573 represent PCR primers  
 CC used in the exemplifications of the invention to test for Y-specific STSs  
 CC (sequence tagged sites)  
 XX  
 SQ Sequence 18 BP; 2 A; 11 C; 0 G; 5 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 2.2e+02;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1560 AAGAGGGGGGATGG 1573  
 DB 17 AAGAGGGGGGATGG 4  
 RESULT 278  
 ADR75087/c  
 ID ADR75087 standard; DNA; 18 BP.  
 XX  
 AC ADR75087;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Allele specific primer A for human stenosis associated marker hCV7481596.  
 XX  
 KW Human; ss; PCR; primer; Allele specific primer; coronary stenosis;  
 KW angina; ischaemic chest pain; myocardial infarction;

KW sudden cardiac death; SNP; single nucleotide polymorphism.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004081186-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 10-MAR-2004; 2004WO-US007140.  
 XX  
 PR 10-MAR-2003; 2003US-0453050P.  
 PR 30-APR-2003; 2003US-0466437P.  
 XX  
 PA (APPL-) APPLERA CORP.  
 XX  
 PI Cargill M, Devlin JJ, Luke MM;  
 XX  
 DR WPI; 2004-668949/65.  
 XX  
 PT Identifying an individual who has altered risk for developing stenosis  
 PT comprises detecting single nucleotide polymorphism (SNP), in the  
 PT individual's nucleic acids.  
 XX  
 PS Claim 19; SEQ ID NO 68399; 146pp; English.  
 XX  
 CC The invention relates to identifying an individual who has altered risk  
 CC for developing coronary stenosis comprising detecting a single nucleotide  
 CC polymorphism (SNP) in any one of the 67073 nucleotide sequences (not  
 CC given in the specification), in the individual's nucleic acids, where the  
 CC presence of the SNP is correlated with an altered risk for stenosis in  
 CC the individual. Also included are an isolated nucleic acid molecule  
 CC (comprising at least 8 contiguous nucleotides where one of the  
 CC nucleotides is an SNP as cited above, or their complement), an isolated  
 CC polypeptide comprising an amino acid sequence selected from any of the  
 CC 696 amino acid sequences (not defined in the specification), an antibody  
 CC that specifically binds to the polypeptide (or its antigen-binding  
 CC fragment), an amplified polynucleotide containing the SNP as cited (where  
 CC the amplified polynucleotide is between about 16 and about 1,000  
 CC nucleotides in length), an isolated polynucleotide which specifically  
 CC hybridises to a nucleic acid molecule containing the SNP, a kit for  
 CC detecting a SNP in a nucleic acid, detecting a SNP in a nucleic acid  
 CC molecule, detecting a variant polypeptide and identifying an agent useful  
 CC in therapeutically or prophylactically treating stenosis. The detection  
 CC step of the method is carried out by a process selected from allele-  
 CC specific probe hybridisation, allele-specific primer extension, allele-  
 CC specific amplification, sequencing, 5' nuclease digestion, molecular  
 CC beacon assay, oligonucleotide ligation assay, size analysis, and single-  
 CC stranded conformation polymorphism. The method is useful for identifying  
 CC an individual who has altered risk for developing coronary stenosis,  
 CC which can lead to angina (ischaemic chest pain), myocardial infarction  
 CC and ultimately sudden cardiac death. The present sequence is an allele  
 CC specific primer for amplifying a SNP-containing region of a human marker  
 CC gene associated with stenosis. NOTE: SEQ ID 1-67771 are not shown in the  
 CC specification but are provided on a CD-R named CL001510CDR which was not  
 CC supplied with the specification.  
 XX  
 SQ Sequence 18 BP; 2 A; 8 C; 2 G; 6 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 14; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 2.2e+02;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 357 AGACCATGAGGTGG 370  
 DB 14 AGACCATGAGGTGG 1  
 RESULT 279  
 AAT89136/c  
 ID AAT89136 standard; RNA; 17 BP.  
 XX  
 AC AAT89136;  
 XX

```
DT 04-MAR-1998 (first entry)
XX Lutetium texaphyrin RNA conjugate for light induced cleavage of DNA.
DE
XX Photosensitive; texaphyrin; DNA cleavage; light induced; photocleavage;
KW lutetium; ss.
XX
XX Synthetic.
OS
XX Key Location/Qualifiers
FH 1. .17
FT misc_binding /tag= b
FT /note= "this region binds to AAT89138"
FT misc_feature 1
FT /tag= a
FT /mod_base
FT /note= "modified by lutetium(III)texaphyrin compound"
FT misc_feature 17
FT /tag= c
FT /note= "modified by a methoxy group"
FT
XX WO9609315-A1.
PN
XX 28-MAR-1996.
PD
XX 21-SEP-1995; 95WO-US012312.
XX
XX 21-SEP-1994; 94US-00310501.
PR
XX 06-JUN-1995; 95US-00469177.
XX
XX (TEXA ) UNIV TEXAS SYSTEM.
PA (PHAR-) PHARMACYCLICS INC.
XX
XX Magda D. Sessler JL, Iverson BL, Sansom PI, Wright M, Mody TD;
PI Hemmi GW;
XX
XX WPI; 1996-200644/20.
DR
XX Use of photosensitive texaphyrin cpds. - for light-induced cleavage of
XX polymers of deoxyribonucleic acid in analyses or therapy.
XX
XX Example 9; Fig 4; 81pp; English.
PS
XX The present sequence represents RNA coupled to a photosensitive
XX texaphyrin molecule, which was used in a new method for photocleavage of
XX DNA. Targeted intracellular light-induced cleavage of a selected DNA
XX comprises introducing into a cell a photosensitive texaphyrin (PT)
XX coupled to an oligonucleotide which is complementary to the selected DNA
XX and exposing the cell to light to cleave the DNA. Modulating the activity
XX of a selected DNA comprises contacting the DNA with a PT coupled to an
XX oligonucleotide which binds to the DNA and exposing the DNA-PT mixture to
XX light to cleave the DNA. These methods can be used e.g. in cleavage of
XX DNA in footprinting analysis, DNA sequencing, chromosome analyses, gene
XX isolation, recombinant DNA manipulations, mapping of large genomes and
XX chromosomes and for site-directed mutagenesis. They can also be used in
XX anti-viral therapy and for the treatment of cancers, inflammatory
XX responses that are caused by over expression of certain proteins,
XX infectious diseases and genetically-based disorders
XX
XX Sequence 17 BP; 0 A; 4 C; 0 G; 0 T; 13 U; 0 Other;
SQ Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.1e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1652 AAAGAAAATAGAGAGA 1668
DB 17 AAAGAAAAGAGAGAGA 1

RESULT 280
AAAX68969
ID AAX68969 standard; RNA; 17 BP.
```

```
XX AAX68969;
AC
XX 28-JUL-1999 (first entry)
DT
XX Human flt1 VEGF receptor hammerhead ribozyme substrate #264.
DE
XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
XX Homo sapiens.
OS
XX WO9715662-A2.
PN
XX 01-MAY-1997.
PD
XX 25-OCT-1996; 96WO-US017480.
XX
XX 26-OCT-1995; 95US-0005974P.
PR
XX 11-JAN-1996; 96US-00584040.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (CHIR ) CHIRON CORP.
XX
XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
PI WPI; 1997-259017/23.
XX
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
XX stability - useful for treating e.g. tumour angiogenesis, psoriasis,
XX rheumatoid arthritis, etc., in a human patient.
XX
XX Claim 4; Page 54; 218pp; English.
XX
XX The present invention describes nucleic acid molecules which modulate the
XX synthesis, expression and/or stability of a mRNA encoding 1 or more
XX receptors of vascular endothelial growth factor (VEGF). A patient
XX (preferably human) having a condition associated with the level of the
XX fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
XX receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
XX angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
XX treated by administering the nucleic acid molecule or the expression
XX vector to the patient. AAX67275 to AAX75752 represent specific examples
XX of nucleic acid molecules from the present invention
XX
XX Sequence 17 BP; 6 A; 6 C; 1 G; 0 T; 4 U; 0 Other;
SQ Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 2.1e+02;
Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY 984 ACCCTGTATACGAGT 1000
DB 1 ACCCCUGUAACCAUAU 17

RESULT 281
AAAX6445
ID AAA36445 standard; DNA; 17 BP.
XX
XX AAA36445;
AC
XX
XX 26-JUL-2000 (first entry)
DT
XX Human genomic SNP allele specific oligonucleotide SEQ ID NO:510.
DE
XX Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis;
KW allele specific oligonucleotide; ASO; reduced complexity genome; RCG;
KW genomic classification; identification; DNA fingerprinting;
KW tumour characterisation; hybridisation; ss.
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XX OS Homo sapiens.
XX PN WO200018960-A2.
XX PD 06-APR-2000.
XX PF 24-SEP-1999; 99WO-US022283.
XX PR 25-SEP-1998; 98US-0101757P.
XX PA (MASI ) MASSACHUSETTS INST TECHNOLOGY.
XX PI Landers JE, Jordan B, Housman DE, Charest A;
XX PT WPI; 2000-293181/25.
XX DR
XX CC Detection of single nucleotide polymorphisms in genomes by preparation
XX PT and analysis of reduced complexity genomes, useful for genotyping,
XX PT fingerprinting and determining allele frequency of SNPs.
XX PS Disclosure; Page 68; 111pp; English.
XX CC A method has been developed for detecting the presence or absence of a
XX CC single nucleotide polymorphism (SNP) allele in a genomic sample. The
XX CC method comprises preparing a reduced complexity genome (RCG) from the
XX CC genomic sample and analysing the RCG for the presence or absence of a SNP
XX CC allele. The method can be used to characterise a tumour, to generate a
XX CC genomic pattern for an individual genome or to generate a genomic
XX CC classification code for a genome. The method can be used to assess
XX CC whether a subject is at risk for developing a disease or to identify a
XX CC set of SNP alleles associated with a disease. The method can also be used
XX CC to perform linkage analysis. AAA35944 to AAA35947 represent sequences
XX CC used in the exemplification of the present invention. AAA35948 to
XX CC AAA36632 represent nucleotide sequences containing SNPs
XX SQ Sequence 17 BP; 2 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
XX Query Match 0.7%; Score 13.8; DB 1; Length 17;
XX Best Local Similarity 88.2%; Pred. No. 2.1e+02;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1176 TCACCTTCGGGTACATG 1192
DB 1 TCACGTCGCGGTACGTG 17
RESULT 282
AAA36383/C
ID AAA36383 standard; DNA; 17 BP.
XX AC AAA36383;
XX DT 26-JUL-2000 (first entry)
XX DE Human genomic SNP allele specific oligonucleotide SEQ ID NO:417.
XX PF 24-SEP-1999; 99WO-US022283.
XX KW Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis;
XX KW allele specific oligonucleotide; ASO; reduced complexity genome; RCG;
XX KW genomic classification; identification; DNA fingerprinting;
XX KW tumour characterisation; hybridisation; ss.
XX OS Homo sapiens.
XX PN WO200018960-A2.
XX PD 06-APR-2000.
XX PF 24-SEP-1999; 99WO-US022283.
XX PR 25-SEP-1998; 98US-0101757P.
XX PA (MASI ) MASSACHUSETTS INST TECHNOLOGY.
```

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XX PI Landers JE, Jordan B, Housman DE, Charest A;
XX PN WPI; 2000-293181/25.
XX DR
XX CC Detection of single nucleotide polymorphisms in genomes by preparation
XX PT and analysis of reduced complexity genomes, useful for genotyping,
XX PT fingerprinting and determining allele frequency of SNPs.
XX PS Disclosure; Page 66; 111pp; English.
XX CC A method has been developed for detecting the presence or absence of a
XX CC single nucleotide polymorphism (SNP) allele in a genomic sample. The
XX CC method comprises preparing a reduced complexity genome (RCG) from the
XX CC genomic sample and analysing the RCG for the presence or absence of a SNP
XX CC allele. The method can be used to characterise a tumour, to generate a
XX CC genomic pattern for an individual genome or to generate a genomic
XX CC classification code for a genome. The method can be used to assess
XX CC whether a subject is at risk for developing a disease or to identify a
XX CC set of SNP alleles associated with a disease. The method can also be used
XX CC to perform linkage analysis. AAA35944 to AAA35947 represent sequences
XX CC used in the exemplification of the present invention. AAA35948 to
XX CC AAA36632 represent nucleotide sequences containing SNPs
XX SQ Sequence 17 BP; 5 A; 6 C; 4 G; 2 T; 0 U; 0 Other;
XX Query Match 0.7%; Score 13.8; DB 1; Length 17;
XX Best Local Similarity 88.2%; Pred. No. 2.1e+02;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1176 TCACCTTCGGGTACATG 1192
DB 17 TCACGTCGCGGTACGTG 1
RESULT 283
AAA36403
ID AAA36403 standard; DNA; 17 BP.
XX AC AAA36403;
XX DT 26-JUL-2000 (first entry)
XX DE Human genomic SNP allele specific oligonucleotide SEQ ID NO:469.
XX KW Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis;
XX KW allele specific oligonucleotide; ASO; reduced complexity genome; RCG;
XX KW genomic classification; identification; DNA fingerprinting;
XX KW tumour characterisation; hybridisation; ss.
XX OS Homo sapiens.
XX PN WO200018960-A2.
XX PD 06-APR-2000.
XX PF 24-SEP-1999; 99WO-US022283.
XX PR 25-SEP-1998; 98US-0101757P.
XX PA (MASI ) MASSACHUSETTS INST TECHNOLOGY.
XX PI Landers JE, Jordan B, Housman DE, Charest A;
XX PN WPI; 2000-293181/25.
XX DR
XX CC Detection of single nucleotide polymorphisms in genomes by preparation
XX PT and analysis of reduced complexity genomes, useful for genotyping,
XX PT fingerprinting and determining allele frequency of SNPs.
XX PS Disclosure; Page 67; 111pp; English.
XX CC A method has been developed for detecting the presence or absence of a
```



CC single nucleotide polymorphism (SNP) allele in a genomic sample. The  
 CC method comprises preparing a reduced complexity genome (RCG) from the  
 CC genomic sample and analysing the RCG for the presence or absence of a SNP  
 CC allele. The method can be used to characterise a tumour, to generate a  
 CC genomic pattern for an individual genome or to generate a genomic  
 CC classification code for a genome. The method can be used to assess  
 CC whether a subject is at risk for developing a disease or to identify a  
 CC set of SNP alleles associated with a disease. The method can also be used  
 CC to perform linkage analysis. AAA35944 to AAA35947 represent sequences  
 CC used in the exemplification of the present invention. AAA35948 to  
 CC AAA36632 represent nucleotide sequences containing SNPs

XX  
 SQ Sequence 17 BP; 2 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred. No. 2.le+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1176 TCACCTTCGGGTACATG 1192  
 |||||  
 1 TCACGTTCCGGGTACGTG 17

Db

RESULT 284  
 AAA25180/c  
 ID AAA25180 standard; DNA; 17 BP.  
 XX  
 AC AAA25180;  
 XX  
 DT 19-JUL-2000 (first entry)  
 XX  
 DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1678.

XX Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;  
 KW hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;  
 KW gene expression modification; cancer; phosphorothioate; endonuclease;  
 KW anticancer; breast cancer; endometrium cancer; ss.  
 XX  
 OS Homo sapiens.  
 XX WO9954459-A2.  
 PN  
 XX 28-OCT-1999.  
 XX  
 XX 19-APR-1999; 99WO-US008547.  
 PF  
 XX 20-APR-1998; 98US-0082404P.  
 PR  
 XX 23-JUN-1998; 98US-00103636.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 XX Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;  
 PI Reynolds M, Zwick M, Jarvis T, Woolf T, Haeberli P;  
 PI Matulic-Adamic J;  
 XX  
 XX WPI; 2000-013248/01.  
 DR  
 XX New nucleic acids that interact, and optionally cleave, target sequences,  
 PT used to treat cancer.  
 PT  
 XX Claim 77; Page 71; 149pp; English.

XX The present invention describes nucleic acids (A) that interact stably  
 CC with a target sequence and contain at least one phosphorodithioate  
 CC link having endonuclease activity. (A), and more generally any catalytic  
 CC nucleic acid (A') that modulates expression of the oestrogen receptor  
 CC gene, are used to treat cancer (particularly of breast or endometrium),  
 CC in vivo or by transforming cells ex vivo and implanting treated cells, or  
 CC for other conditions associated with levels of oestrogen receptor.  
 CC Because of the high selectivity for targeted RNA, (A) can also be used to  
 CC correlate inhibition of gene expression with alterations in phenotype,  
 CC particularly for identification of therapeutic targets, and as research  
 CC reagents (for RNA, in the same way that restriction endonucleases are

CC used with DNA). The combination of modifications in (A) improves  
 CC resistance to nucleases, binding affinity and/or activity. AAA23503 to  
 CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and  
 CC AAA24748 to AAA25992 represent their corresponding target sequences.  
 CC AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme  
 CC sequences, and AAA26107 to AAA26218 represent their corresponding target  
 CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and  
 CC invention

XX  
 SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred. No. 2.le+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1656 AAAAATAAGAGAAAAA 1672  
 |||||  
 17 AAAAATAAGAGAAAAA 1

Db

RESULT 285  
 ABK01801/c  
 ID ABK01801 standard; RNA; 17 BP.  
 XX  
 AC ABK01801;  
 XX  
 DT 12-MAR-2002 (first entry)  
 XX  
 DE Human NOGO Zinzyme #123.

XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 KW cerebrotective; neurotropic; neuroprotective; antiparkinsonian;  
 KW musclar; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNzyme; inozyme; G-cleaver; amberszyme; zinzyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW MCL; immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW inflammatory arthropathy; immune thrombocytopaenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 XX WO200159103-A2.  
 XX  
 XX 16-AUG-2001.  
 XX  
 XX 09-FEB-2001; 2001WO-US004273.  
 PF  
 XX 11-FEB-2000; 2000US-0181797P.  
 PR  
 XX 28-FEB-2000; 2000US-0185516P.  
 PR  
 XX 06-MAR-2000; 2000US-0187128P.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (CHOW/) CHOWRINA B M.  
 XX  
 XX Blatt L, Mcswiggen J, Chowrira BM;  
 PI WPI; 2001-607195/69.  
 XX  
 DR Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
 PT constructs, which down regulate expression of a CD20 gene or neurite  
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
 PT central nervous system injury.  
 XX  
 XX Claim 88; Page 98; 200pp; English.  
 XX

CC The invention relates to a nucleic acid molecule which down regulates  
 CC expression of a CD20 gene and a nucleic acid molecule which down  
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
 CC DNzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule  
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
 CC an amberzyme (cleaving RNA with an NGN triplet), a zynzyme (cleaving RNA  
 CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA  
 CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
 CC the cell and treat a patient having a condition associated with the level  
 CC of CD20. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
 CC immune thrombocytopenia, and inflammatory arthropathy. The NOGO-  
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
 CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
 CC cell and treat a patient having a condition associated with the level of  
 CC NOGO. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to  
 CC treat central nervous system (CNS) injury and cerebrovascular accident  
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 CC disease, muscular dystrophy, and/or other neurodegenerative disease  
 CC states which respond to the modulation of NOGO expression. The present  
 CC sequence is a zynzyme molecule of the invention  
 CC  
 CC Sequence 17 BP; 4 A; 6 C; 4 G; 0 T; 3 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 2.1e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 438 TGCITGACCGCGGCTG 454

DB 17 TACTTGAACGCGGCTG 1

RESULT 286

ABK03731

ID ABK03731 standard; RNA; 17 BP.

XX AC ABK03731;

DT 12-MAR-2002 (first entry)

DE Human CD20 Amberzyme #80.

XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNzyme; inozyme; G-cleaver; amberzyme; zynzyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

OS Homo sapiens.

OS Synthetic.

XX PN WO200159103-A2.

XX PD 16-AUG-2001.

XX

09-FEB-2001; 2001WO-US004273.

11-FEB-2000; 2000US-0181797P.

28-FEB-2000; 2000US-0185516P.

06-MAR-2000; 2000US-0187128P.

(RIBO-) RIBOZYME PHARM INC.

(BLAT/) BLATT L.

(MCSW/) MCSWIGGEN J.

(CHOW/) CHOWRIRA B M.

Blatt L, Mcswiggen J, Chowrira BM;

WPI; 2001-607195/69.

Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense

constructs, which down regulate expression of a CD20 gene or neurite

growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and

central nervous system injury.

Claim 30; Page 167; 200pp; English.

The invention relates to a nucleic acid molecule which down regulates  
 expression of a CD20 gene and a nucleic acid molecule which down  
 regulates expression of a neurite growth inhibitor gene (NOGO). The  
 nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
 DNzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule  
 possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
 an amberzyme (cleaving RNA with an NGN triplet), a zynzyme (cleaving RNA  
 with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA  
 of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
 Furthermore, it may be contacted with a cell to reduce CD20 activity of  
 the cell and treat a patient having a condition associated with the level  
 of CD20. The treatment may further comprise the use of one or more  
 therapies. In particular, the CD20 targeting nucleic acid may be used to  
 treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
 Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
 leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
 lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
 immune thrombocytopenia, and inflammatory arthropathy. The NOGO-  
 targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
 presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
 nucleic acid may be contacted with a cell to reduce NOGO activity of the  
 cell and treat a patient having a condition associated with the level of  
 NOGO. The treatment may further comprise the use of one or more  
 therapies. In particular, the NOGO-targeting nucleic acid may be used to  
 treat central nervous system (CNS) injury and cerebrovascular accident  
 (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
 chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
 Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 disease, muscular dystrophy, and/or other neurodegenerative disease  
 states which respond to the modulation of NOGO expression. The present  
 sequence is an amberzyme molecule of the invention

Sequence 17 BP; 12 A; 2 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 2.1e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1548 CAGCAGAGAGAGAGAA 1564

DB 1 CAGCAGAGAGAGAGAAA 17

RESULT 287

AAI68655

ID AAI68655 standard; DNA; 17 BP.

XX AC AAI68655;

XX DT 14-JAN-2002 (first entry)

XX

DE ICAM-1 triple helix associated oligonucleotide SEQ ID 57.

XX ICAM-1; triple helix; transcription inhibition; antiproliferative;  
 KW intracellular adhesion molecule; dermatological; antiasthmatic;  
 KW antiinflammatory; immunosuppressive; gastrointestinal; psoriasis;  
 KW neurodermatitis; allergic asthma; Crohn's disease; autoimmune disease;  
 KW transplant rejection; psoriasis; photo-ultra-violet therapy; ds.  
 XX Unidentified.

OS WO200179487-A2.

XX 25-OCT-2001.

XX 18-APR-2001; 2001WO-DE001509.

XX 18-APR-2000; 2000DE-01019252.

XX (DEGI/) DEGITZ K K.

PA (BESCH/) BESCH R.

XX Degitz KK, Besch R;

XX WPI; 2002-017614/02.

XX Triple-helix forming polydeoxyribonucleotides, useful for treating  
 PT intracellular adhesion molecule-1 related diseases, e.g. psoriasis, are  
 PT directed against transcribed or promoter regions of the ICAM-1 gene.

XX Claim 5; Page 18; 61pp; German.

XX This invention describes novel polydeoxyribonucleotides (A), for use as  
 CC triple-helix forming oligonucleotides, having at least 3 sequential  
 CC purine and/or pyrimidine bases, capable of inhibiting transcription of  
 CC ICAM-1. (A) has a sequence specific for the transcribed or promoter  
 CC regions of the ICAM-1 (intracellular adhesion molecule) gene. The  
 CC products of the invention have antiproliferative, dermatological,  
 CC antiasthmatic, antiinflammatory, immunosuppressive and gastrointestinal  
 CC activity. (A) are used for treatment or prevention of ICAM-1-associated  
 CC diseases, specifically psoriasis, neurodermatitis, allergic asthma,  
 CC Crohn's disease, autoimmune diseases and transplant rejection. Compared  
 CC with antisense oligonucleotides, (A) provide a longer-lasting effect  
 CC (they bind directly to the gene, so a compensatory increase in  
 CC transcription is not possible). (A) may be coupled to psoralen to provide  
 CC light-regulatable, sequence-specific downregulation of genes; this should  
 CC make photo-ultra-violet therapy more specific, with reduced side effects.  
 CC AAI68599-AAI68673 represent oligonucleotides used to illustrate the  
 CC method of the invention

XX Sequence 17 BP; 0 A; 6 C; 0 G; 11 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred. No. 2.1e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 173 CTTTCCTCTTCCTTTT 189  
 DB 1 CTTTCCTCTTCCTTTT 17

RESULT 288  
 ABK25739  
 ID ABK25739 standard; DNA; 17 BP.

XX ABK25739;

XX 09-APR-2002 (first entry)

XX Stress tolerance conferring genome altering oligonucleotide #207.

XX Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;  
 KW o-methyl modification; LNA modification; phosphorothioate linkage;  
 KW DNA repair; DNA alteration; environmental tolerance; hygromycin-B;

abiotic stress tolerance; improved nutritional value; hygromycin; primer;  
 amino acid over production; herbicide resistance; glyphosate resistance;  
 imidazolinone herbicide resistance; sulphonylurea herbicide resistance;  
 porphyrin herbicide resistance; triazine resistance; disease resistance;  
 modified oil production; modified starch production; waxy starch;  
 altered floral morphology; male-sterile plant; albino mutant;  
 modified fatty acid content; reduced palmitate production; albino plant;  
 increased stearate production; reduced linolenic acid production;  
 photosynthetic process.

Brassica napus.  
 Synthetic.

WO200192512-A2.

06-DEC-2001.

01-JUN-2001; 2001WO-US017672.

01-JUN-2000; 2000US-0208538P.

30-OCT-2000; 2000US-0244989P.

27-MAR-2001; 2001US-00818875.

(UYDE ) UNIV DELAWARE.

Kmiec EB, Gamber HB, Rice MC, Kim J;  
 WPI; 2002-106307/14.

New oligonucleotides with modified nuclease-resistant termini, useful for  
 creating plants with desired phenotypes, e.g. stress tolerance, improved  
 nutritional value, herbicide or disease resistance, or modified oil  
 production.

Claim 7; Page 108; 220pp; English.

The invention relates to an oligonucleotide for targeted alteration of a  
 genetic sequence, which comprises a single-stranded oligonucleotide  
 having a DNA domain. The DNA domain has at least one mismatch with  
 respect to the genetic sequence to be altered and further comprises  
 chemical modifications of the oligonucleotide. The chemical modifications  
 consist of o-methyl modification, an LNA modification, two or more  
 phosphorothioate linkages on a terminus, or a combination of any two or  
 more of these modifications. The oligonucleotides are useful for  
 directing repair or alteration of plant genetic information. The  
 oligonucleotides are particularly useful for creating plants with desired  
 phenotypes, e.g. environmental or abiotic stress tolerance, improved  
 nutritional value (e.g. altering amino acid content of plants or  
 conferring amino acid over production), herbicide resistance (e.g.  
 glyphosate resistance, imidazolinone and sulphonylurea herbicide  
 resistance, porphyrin herbicide resistance or triazine resistance),  
 disease resistance, modified oil production, modified starch production  
 (e.g. increased starch or production of waxy starch), altered floral  
 morphology (e.g. male-sterile plants) or modified fatty acid content  
 (e.g. reduced palmitate, increased stearate or reduced linolenic acid).  
 The oligonucleotides are also useful for producing albino mutants for the  
 analysis of photosynthetic processes. This sequence represents a genome  
 altering oligonucleotide of the invention

Sequence 17 BP; 2 A; 3 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred. No. 2.1e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1890 TCAGCATGATGGCTGG 1906  
 DB 1 TCAGCTTCATGGCTGG 17

RESULT 289  
 ABK25740/c  
 ID ABK25740 standard; DNA; 17 BP.

XX  
AC ABK25740;  
XX  
DT 09-APR-2002 (first entry)  
XX  
DE Stress tolerance conferring genome altering oligonucleotide #208.  
XX  
KW Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;  
KW o-methyl modification; LNA modification; phosphorothioate linkage;  
KW DNA repair; DNA alteration; environmental tolerance; hygromycin-B;  
KW abiotic stress tolerance; improved nutritional value; hygromycin-B;  
KW amino acid over production; herbicide resistance; glyphosate resistance;  
KW imidazolinone herbicide resistance; sulphonylurea herbicide resistance;  
KW porphyrin herbicide resistance; triazine resistance; disease resistance;  
KW modified oil production; modified starch production; waxy starch;  
KW altered floral morphology; male-sterile plant; albino mutant;  
KW modified fatty acid content; reduced palmitate production; albino plant;  
KW increased stearate production; reduced linolenic acid production;  
KW photosynthetic process.  
XX  
OS Brassica napus.  
OS Synthetic.  
XX  
FN WO200192512-A2.  
XX  
PD 06-DEC-2001.  
XX  
PF 01-JUN-2001; 2001WO-US017672.  
XX  
PR 01-JUN-2000; 2000US-0208538P.  
PR 30-OCT-2000; 2000US-0244989P.  
PR 27-MAR-2001; 2001US-00818875.  
XX  
PA (UYDE ) UNIV DELAWARE.  
XX  
PI Kmiec EB, Gamber HB, Rice MC, Kim J;  
XX  
DR WPI; 2002-106307/14.  
XX  
PT New oligonucleotides with modified nuclease-resistant termini, useful for  
PT creating plants with desired phenotypes, e.g. stress tolerance, improved  
PT nutritional value, herbicide or disease resistance, or modified oil  
PT production.  
XX  
PS Claim 7; Page 108; 220pp; English.  
XX  
CC The invention relates to an oligonucleotide for targeted alteration of a  
CC genetic sequence, which comprises a single-stranded oligonucleotide  
CC having a DNA domain. The DNA domain has at least one mismatch with  
CC respect to the genetic sequence to be altered and further comprises  
CC chemical modifications of the oligonucleotide. The chemical modifications  
CC consist of o-methyl modification, an LNA modification, two or more  
CC phosphorothioate linkages on a terminus, or a combination of any two or  
CC more of these modifications. The oligonucleotides are useful for  
CC directing repair or alteration of plant genetic information. The  
CC oligonucleotides are particularly useful for creating plants with desired  
CC phenotypes, e.g. environmental or abiotic stress tolerance, improved  
CC nutritional value (e.g. altering amino acid content of plants or  
CC conferring amino acid over production), herbicide resistance (e.g.  
CC glyphosate resistance, imidazolinone and sulphonylurea herbicide  
CC resistance, porphyrin herbicide resistance or triazine resistance),  
CC disease resistance, modified oil production, modified starch production  
CC (e.g. increased starch or production of waxy starch), altered floral  
CC morphology (e.g. male-sterile plants) or modified fatty acid content  
CC (e.g. reduced palmitate, increased stearate or reduced linolenic acid).  
CC The oligonucleotides are also useful for producing albino mutants for the  
CC analysis of photosynthetic processes. This sequence represents a genome  
CC altering oligonucleotide of the invention  
XX  
SQ Sequence 17 BP; 6 A; 6 C; 3 G; 2 T; 0 U; 0 Other;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1890 TCAGCATGATGGCTGG 1906  
||||| ||||| ||||| |||||  
DB 17 TCAGCTTGATTGCTGG 1  
RESULT 290  
ABV78890/c  
ID ABV78890 standard; DNA; 17 BP.  
XX  
AC ABV78890;  
XX  
DT 03-JAN-2003 (first entry)  
XX  
DE Human HTPL scanning oligonucleotide SEQ ID 136.  
XX  
KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;  
KW human testis expressed Patched like protein; testis; adrenal; liver;  
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;  
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.  
XX  
OS Homo sapiens.  
XX  
FN EP1229046-A2.  
XX  
PD 07-AUG-2002.  
XX  
PF 28-JAN-2002; 2002EP-00001167.  
XX  
PR 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 23-MAY-2001; 2001US-00864761.  
PR 09-OCT-2001; 2001US-0327898P.  
XX  
PA (AEOM-) AEOMICA INC.  
XX  
PI Zhan J;  
XX  
DR WPI; 2002-676582/73.  
XX  
PT Novel isolated human testis expressed Patched like protein (HTPL), useful  
PT for identifying agonist and antagonist and specific binding partners, and  
PT for treating subjects having defects in HTPL.  
XX  
PS Example 2; Page 81; 718pp; English.  
XX  
CC The present invention relates to human testis expressed Patched like  
CC protein (HTPL), see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL  
CC has two isoforms, with a few single base pair differences between the  
CC two. One of the single base pair changes introduces a premature stop  
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL  
CC shares an overall structure organisation with the Patched protein. The  
CC shared structural features strongly imply that HTPL plays a role similar  
CC to that of Patched, and is a potential tumour suppressor. HTPL is  
CC important in regulating male germ cell development, and the HTPL gene was  
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are  
CC useful for diagnosing a disorder caused by mutation in HTPL, and in  
CC therapy and manufacture of a medicament for treatment or prevention of  
CC such disorder associated with decreased expression or activity of human  
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and  
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,  
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are  
CC clinically useful diagnostic markers and potential therapeutic agents for  
CC male infertility and cancer. The present oligonucleotide was used in an  
CC example from the invention  
XX  
SQ Sequence 17 BP; 6 A; 5 C; 6 G; 0 T; 0 U; 0 Other;

CC targeting genes that share homology with ERG gene or ERG fusion genes.  
CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
CC related PCR primers of the invention  
XX  
SQ Sequence 17 BP; 3 A; 4 C; 6 G; 0 T; 4 U; 0 Other;  
  
Query Match 0.7%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 70.6%; Pred. No. 2.1e+02;  
Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;  
  
QY 1889 CTCAGCATGATGGCGTCG 1905  
|:|||||:|:|:|:|  
DB 1 CUCAGCAGGAUUGCUG 17  
  
RESULT 292  
ABK17937  
ID ABK17937 standard; RNA; 17 BP.  
XX  
XX ABK17937;  
XX  
DT 09-APR-2002 (first entry)  
XX  
DE Human ERG hammerhead ribozyme target sequence, Seq ID No 584.  
XX  
KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
KW vulnarary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;  
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;  
KW amberzyme.  
XX  
OS Homo sapiens.  
XX  
PN WO2001188124-A2.  
XX  
PD 22-NOV-2001.  
XX  
PF 16-MAY-2001; 2001WO-US015866.  
XX  
PP 16-MAY-2000; 2000US-00572021.  
XX  
PR (RIBO-) RIBOZYME PHARM INC.  
PA (GLAX ) GLAXO GROUP LTD.  
PA  
XX  
XX  
PI Jarvis T, Von Carlowitz I, Mcswiggen JA, Mclaughlin F, Randi AM;  
PI WPI; 2002-082995/11.  
DR  
DR Novel polynucleotide which down regulates expression of Ets-related gene,  
PT useful for treating cancer, diabetic retinopathy, macular degeneration,  
PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
PT  
PS Claim 4; Page 69; 149pp; English.  
XX  
XX The invention relates to a nucleic acid molecule (I) which down regulates  
CC expression of an Ets-related gene (ERG). (I) is useful for treating  
CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
CC tumour angiogenesis, diabetic retinopathy, macular degeneration,  
CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
CC vulgaris, angiobroma of tuberous sclerosis, port-wine stains, Sturge  
CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
CC treating a patient having a condition associated with the level of ERG,  
CC by contacting cells of the patient with (I) under conditions suitable for  
CC the treatment. The method comprises the use of one or more therapies  
CC under conditions suitable for the treatment. Leukaemia or tumour  
CC angiogenesis is treated by administering (I) to the patient in  
CC conjunction with one or more of other therapies such as radiation or

CC chemotherapy treatment. (I) is useful for reducing ERG activity in a  
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
 CC cation such as Mg<sup>2+</sup>. (I) is useful for diagnosis of conditions and  
 CC diseases related to the expression of ERG, and as diagnostic tool to  
 CC examine genetic drift and mutations within diseased cells or to detect  
 CC the presence of ERG RNA in a cell. (I) is useful for specifically  
 CC targeting genes that share homology with ERG gene or ERG fusion genes.  
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
 CC related PCR primers of the invention  
 XX  
 SQ Sequence 17 BP; 3 A; 6 C; 5 G; 0 T; 3 U; 0 Other;  
 Query Match 0.7%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 76.5%; Pred. No. 2.1e+02;  
 Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
 QY 1887 CCTCAGCATGATGGGC 1903  
 |||:||||| ||: |||  
 DB 1 CCUCAGCAGGAUUGGC 17  
 RESULT 293  
 ABK19167  
 ID ABK19167 standard; RNA; 17 BP.  
 XX  
 AC ABK19167;  
 DT  
 DT 09-APR-2002 (first entry)  
 XX  
 DE Human ERG Amberzyme target sequence Seq ID No 1814.  
 XX  
 KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
 KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
 KW vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
 KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
 KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
 KW angiofibroma of tuberosus sclerosis; port-wine stain; wound healing;  
 KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
 KW Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNazyme; inozyme;  
 KW amberzyme.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO20018124-A2.  
 XX  
 PD 22-NOV-2001.  
 XX  
 PF 16-MAY-2001; 2001WO-US015866.  
 XX  
 PR 16-MAY-2000; 2000US-00572021.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PA (GLAXO) GLAXO GROUP LTD.  
 XX  
 XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
 XX WPI; 2002-082995/11.  
 DR  
 XX  
 XX Novel polynucleotide which down regulates expression of Ets-related gene,  
 PT useful for treating cancer, diabetic retinopathy, macular degeneration,  
 PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
 XX  
 XX Claim 4; Page 121; 149pp; English.  
 PS  
 XX The invention relates to a nucleic acid molecule (I) which down regulates  
 CC expression of an Ets-related gene (ERG). (I) is useful for treating  
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,  
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
 CC vulgaris, angiofibroma of tuberosus sclerosis, port-wine stains, Sturge  
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu

CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
 CC treating a patient having a condition associated with the level of ERG,  
 CC by contacting cells of the patient with (I) under conditions suitable for  
 CC the treatment. The method comprises the use of one or more therapies  
 CC under conditions suitable for the treatment. Leukaemia or tumour  
 CC angiogenesis is treated by administering (I) to the patient in  
 CC conjunction with one or more of other therapies such as radiation or  
 CC chemotherapy treatment. (I) is useful for reducing ERG activity in a  
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
 CC cation such as Mg<sup>2+</sup>. (I) is useful for diagnosis of conditions and  
 CC diseases related to the expression of ERG, and as diagnostic tool to  
 CC examine genetic drift and mutations within diseased cells or to detect  
 CC the presence of ERG RNA in a cell. (I) is useful for specifically  
 CC targeting genes that share homology with ERG gene or ERG fusion genes.  
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
 CC related PCR primers of the invention  
 XX  
 SQ Sequence 17 BP; 3 A; 5 C; 5 G; 0 T; 4 U; 0 Other;  
 Query Match 0.7%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 70.6%; Pred. No. 2.1e+02;  
 Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;  
 QY 1888 CCTCAGCATGATGGGCT 1904  
 |||:||||| ||: |||  
 DB 1 CCUCAGCAGGAUUGGC 17  
 RESULT 294  
 ACN07767/C  
 ID ACN07767 standard; RNA; 17 BP.  
 XX  
 AC ACN07767;  
 DT 22-APR-2004 (first entry)  
 XX  
 DE WNV minus strand Hammerhead Ribozyme substrate SEQ ID NO 7770.  
 XX  
 KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
 KW virucide; neuroprotective; antibacterial; replication; pancreatitis;  
 KW encephalitis; myocarditis; meningitis; infection; hepatitis;  
 KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;  
 KW Amberzyme; Zinzyme; ss.  
 XX  
 OS West Nile Virus.  
 XX  
 PN WO200268637-A2.  
 XX  
 PD 06-SEP-2002.  
 XX  
 PR 19-OCT-2001; 2001WO-US048350.  
 XX  
 PF 20-OCT-2000; 2000US-0242411P.  
 XX  
 PR (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J A.  
 XX  
 XX Blatt L, Mcswiggen JA;  
 XX WPI; 2002-706994/76.  
 DR  
 XX  
 XX New nucleic acid molecule that modulates replication of West Nile Virus  
 PT (WNV), useful for treating a condition related to WNV infection e.g.  
 PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.  
 PS  
 XX Claim 23; SEQ ID NO 7770; 495pp; English.  
 CC The invention relates to nucleic acid molecules that modulate replication  
 CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for  
 CC treating a condition related to WNV infection e.g. pancreatitis,

CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,  
 CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid  
 CC molecule is selected from the group of ribozymes consisting of  
 CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The  
 CC nucleic acid molecules further comprise at least five ribose residues, at  
 CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
 CC least three of the 5' terminal nucleotides and a 3' end modification of a  
 CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
 CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
 CC in the specification. The present sequence is that of a nucleic acid  
 CC molecule of the invention

XX  
 SQ Sequence 17 BP; 0 A; 5 C; 3 G; 0 T; 9 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred. No. 2.1e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1663 AGAAGAAAACCCGGAG 1679  
 DB 17 AGAAGAAAACCCGGAG 1

RESULT 295  
 ACN10501/C  
 ID ACN10501 standard; RNA; 17 BP.  
 XX  
 AC ACN10501;  
 XX  
 DT 22-APR-2004 (first entry)  
 XX  
 DE WNV minus strand Inozyme substrate SEQ ID NO 10504.  
 XX  
 KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
 KW virucide; neuroprotective; antibacterial; replication; pancreatitis;  
 KW encephalitis; myocarditis; meningitis; infection; hepatitis;  
 KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;  
 KW Amberzyme; Zinzyme; ss.  
 XX  
 OS West Nile Virus.  
 XX  
 PN WO200268637-A2.  
 XX  
 PD 06-SEP-2002.  
 XX  
 PF 19-OCT-2001; 2001WO-US048350.  
 XX  
 PR 20-OCT-2000; 2000US-0242411P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J A.  
 XX  
 PI Blatt L, Mcswiggen JA;  
 XX  
 DR WPI; 2002-706994/76.  
 XX  
 PT New nucleic acid molecule that modulates replication of West Nile Virus  
 PT (WNV), useful for treating a condition related to WNV infection e.g.  
 PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.  
 XX  
 PS Claim 23; SEQ ID NO 10504; 495pp; English.  
 XX  
 CC The invention relates to nucleic acid molecules that modulate replication  
 CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for  
 CC treating a condition related to WNV infection e.g. pancreatitis,  
 CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,  
 CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid  
 CC molecule is selected from the group of ribozymes consisting of  
 CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The  
 CC nucleic acid molecules further comprise at least five ribose residues, at  
 CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
 CC least three of the 5' terminal nucleotides and a 3' end modification of a

CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
 CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
 CC in the specification. The present sequence is that of a nucleic acid  
 CC molecule of the invention

XX  
 SQ Sequence 17 BP; 4 A; 1 C; 7 G; 0 T; 5 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred. No. 2.1e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 939 CACCTGATCGACCTCAA 955  
 DB 17 CACCTCATTGACCTCAA 1

RESULT 296  
 ACN05335  
 ID ACN05335 standard; RNA; 17 BP.  
 XX  
 AC ACN05335;  
 XX  
 DT 22-APR-2004 (first entry)  
 XX  
 DE WNV DNazyme substrate SEQ ID NO 5338.  
 XX  
 KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
 KW virucide; neuroprotective; antibacterial; replication; pancreatitis;  
 KW encephalitis; myocarditis; meningitis; infection; hepatitis;  
 KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;  
 KW Amberzyme; Zinzyme; ss.  
 XX  
 OS West Nile Virus.  
 XX  
 PN WO200268637-A2.  
 XX  
 PD 06-SEP-2002.  
 XX  
 PF 19-OCT-2001; 2001WO-US048350.  
 XX  
 PR 20-OCT-2000; 2000US-0242411P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J A.  
 XX  
 PI Blatt L, Mcswiggen JA;  
 XX  
 DR WPI; 2002-706994/76.  
 XX  
 PT New nucleic acid molecule that modulates replication of West Nile Virus  
 PT (WNV), useful for treating a condition related to WNV infection e.g.  
 PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.  
 XX  
 PS Claim 23; SEQ ID NO 5338; 495pp; English.  
 XX  
 CC The invention relates to nucleic acid molecules that modulate replication  
 CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for  
 CC treating a condition related to WNV infection e.g. pancreatitis,  
 CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,  
 CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid  
 CC molecule is selected from the group of ribozymes consisting of  
 CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The  
 CC nucleic acid molecules further comprise at least five ribose residues, at  
 CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
 CC least three of the 5' terminal nucleotides and a 3' end modification of a  
 CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
 CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
 CC in the specification. The present sequence is that of a nucleic acid  
 CC molecule of the invention

XX  
 SQ Sequence 17 BP; 9 A; 3 C; 5 G; 0 T; 0 U; 0 Other;

```
Query Match      0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.1e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1664 GAAGAAAAACCGGAGA 1680
Db 1 GAGAAAAAACCGGAGA 17

RESULT 297
ACN00957
ID ACN00957 standard; RNA; 17 BP.
XX
AC ACN00957;
XX
DT 22-APR-2004 (first entry)
XX
DE WNV Hammerhead Ribozyme substrate SEQ ID NO 947.
XX
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
KW Amberzyme; Zinzyme; ss.
XX
OS West Nile Virus.
XX
PN WO200268637-A2.
XX
PD 06-SEP-2002.
XX
PF 19-OCT-2001; 2001WO-US048350.
XX
PR 20-OCT-2000; 2000US-0242411P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
PI Blatt L, Mcswiggen JA;
XX
DR WPI; 2002-706994/76.
XX
PT New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS Claim 23; SEQ ID NO 947; 495pp; English.
XX
CC The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
SQ Sequence 17 BP; 5 A; 7 C; 1 G; 0 T; 4 U; 0 Other;

Query Match      0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 2.1e+02;
Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY 939 CACCTGATCGACTCAA 955
Db 1 CACCUCAUUGACCUCAA 17

Query Match      0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 64.7%; Pred. No. 2.1e+02;
Matches 11; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY 973 GTTCGCGGCTACCCCT 989
Db 1 GUUCCGUGCUAGCCCU 17

RESULT 299
ACN13114/c
ID ACN13114 standard; RNA; 17 BP.
XX
AC ACN13114;
```



XX 22-APR-2004 (first entry)  
 XX WNV minus strand Zinzyne substrate SEQ ID NO 13117.  
 DE  
 DE WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
 XX virucide; neuroprotective; antibacterial; replication; pancreatitis;  
 KW encephalitis; myocarditis; meningitis; infection; hepatitis;  
 KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;  
 KW Amberzyme; Zinzyne; ss.  
 XX  
 XX West Nile Virus.  
 OS  
 XX WO200268637-A2.  
 PN  
 XX 06-SEP-2002.  
 PD  
 XX 19-OCT-2001; 2001WO-US048350.  
 XX  
 XX 20-OCT-2000; 2000US-0242411P.  
 PR  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J A.  
 XX  
 XX Blatt L, Mcswiggen JA;  
 PI WPI; 2002-706994/76.  
 DR  
 XX New nucleic acid molecule that modulates replication of West Nile Virus  
 PT (WNV), useful for treating a condition related to WNV infection e.g.  
 PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.  
 PT  
 XX Claim 23; SEQ ID NO 13117; 495pp; English.  
 PS  
 XX The invention relates to nucleic acid molecules that modulate replication  
 CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for  
 CC treating a condition related to WNV infection e.g. pancreatitis,  
 CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,  
 CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid  
 CC molecule is selected from the group of ribozymes consisting of  
 CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyne. The  
 CC nucleic acid molecules further comprise at least five ribose residues, at  
 CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
 CC least three of the 5' terminal nucleotides and a 3' end modification of a  
 CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
 CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
 CC in the specification. The present sequence is that of a nucleic acid  
 CC molecule of the invention  
 XX  
 XX Sequence 17 BP; 5 A; 4 C; 7 G; 0 T; 1 U; 0 Other;  
 SQ

Query Match 0.7%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred. No. 2.1e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 974 TTCCGGGGTACCCCTG 990  
 DB 17 TTCCGGTGTAGCCCTG 1

RESULT 300  
 ABZ61990  
 ID ABZ61990 standard; RNA; 17 BP.  
 XX  
 AC ABZ61990;  
 XX  
 DT 21-MAR-2003 (first entry)  
 XX  
 DE Human H-Ras DNazyme target #781.  
 XX  
 XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;  
 KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;

KW anti-rheumatic; cancer; AIDS; ss.  
 OS Homo sapiens.  
 XX  
 PN WO200297114-A2.  
 XX  
 PD 05-DEC-2002.  
 XX  
 PF 29-MAY-2002; 2002WO-US016840.  
 XX  
 PR 29-MAY-2001; 2001US-0294140P.  
 PR 06-JUN-2001; 2001US-0296249P.  
 PR 10-SEP-2001; 2001US-0318471P.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA  
 XX Mcswiggen J;  
 PI WPI; 2003-140484/13.  
 DR  
 XX Novel short interfering RNA and enzymatic nucleic acid useful for  
 PT treating cancer, modulates the expression of a nucleic acid encoding  
 PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.  
 PT  
 XX Claim 58; Page 126; 185pp; English.  
 PS  
 XX The invention relates to a novel short interfering RNA (siRNA) nucleic  
 CC acid molecule or an enzymatic nucleic acid molecule, that modulates  
 CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,  
 CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic  
 CC acid molecule of the invention has cytostatic, anti-HIV, and anti-  
 CC rheumatic activity. The nucleic acid molecules are useful for reducing  
 CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are  
 CC also useful for treating breast, ovarian, colorectal, lung, prostate,  
 CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences  
 CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,  
 CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human  
 CC ribozymes of the invention  
 XX  
 XX Sequence 17 BP; 2 A; 5 C; 5 G; 0 T; 5 U; 0 Other;  
 SQ

Query Match 0.7%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 64.7%; Pred. No. 2.1e+02;  
 Matches 11; Conservative 4; Mismatches 2; Indels 0; Gaps 0;  
 QY 1789 GGACTTGACCCCTGTCA 1805  
 DB 1 GGACUUGUCCCUUGUCA 17

RESULT 301  
 ACD57068  
 ID ACD57068 standard; RNA; 17 BP.  
 XX  
 AC ACD57068;  
 XX  
 DT 23-SEP-2003 (first entry)  
 XX  
 DE HCV DNazyme substrate sequence #158.  
 XX  
 KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
 KW RNA stability; RNA expression; RNA synthesis; antisense;  
 KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyne;  
 KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;  
 KW HBV reverse transcriptase; Enhancer I region; viral replication;  
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
 KW virucide; antiinflammatory; substrate; ss.  
 XX  
 OS Hepatitis C virus.  
 XX  
 PN WO200281494-A1.  
 XX

PD	17-OCT-2002.
XX	26-MAR-2002; 2002WO-US009187.
XX	26-MAR-2001; 2001US-00817879.
XX	08-JUN-2001; 2001US-00877478.
PR	08-JUN-2001; 2001US-0296876P.
PR	24-OCT-2001; 2001US-0335059P.
PR	05-DEC-2001; 2001US-0337055P.
XX	(RIBO-) RIBOZYME PHARM INC.
PA	(BLAT/) BLATT L.
PA	(MACE/) MACEJAK D.
PA	(MCSW/) MCSWIGGEN J.
PA	(MORR/) MORRISSEY D.
PA	(PVC/) PAVCO P.
PA	(LEEP/) LEE P.
PA	(DRAP/) DRAPER K.
PA	(ROBE/) ROBERTS E.
XX	Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI	Draper K, Roberts E;
XX	WPI; 2003-229207/22.
DR	Novel compound useful for treating cirrhosis, liver failure,
XX	hepatocellular carcinoma, or condition associated with hepatitis C virus
PT	infection.
PT	Claim 1; Page 236; 387pp; English.
XX	The present invention relates to nucleic acid molecules which modulate
CC	the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC	Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC	and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC	inozymes, zinzymes, amberyases, and G-cleaver ribozymes. Also disclosed
CC	are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC	transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC	as oligonucleotides that specifically bind the Enhancer I region of HBV
CC	DNA. The nucleic acids may be used to modulate the expression of HBV
CC	genes and HBV viral replication. Also disclosed is a method for screening
CC	compounds and/or potential therapies directed against HBV, and compounds
CC	that modulate the expression and/or replication of HCV. The compounds and
CC	methods of the invention are useful for the treatment of degenerative and
CC	disease states related to HBV and HCV infection, replication and gene
CC	expression such as cirrhosis, liver failure, and hepatocellular
CC	carcinoma. The present sequence represents a substrate for one of the HCV
CC	DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC	invention
XX	Sequence 17 BP; 4 A; 2 C; 6 G; 0 T; 5 U; 0 Other;
SQL	Query Match 0.7%; Score 13.8; DB 1; Length 17;
	Best Local Similarity 58.8%; Pred. NO. 2.1e+02;
	Matches 10; Conservative 5; Mismatches 2; Indels 0; Gaps 0
QY	1603 TGGGTAAGATCATCGCT 1619
	:   :    :    :    :
Db	1 UGGGUAAGGCUCAUCGAU 17
RESULT 302	
ACD57139	
ID	ACD57139 standard; RNA; 17 BP.
XX	ACD57139;
AC	
XX	
DT	23-SEP-2003 (first entry)
XX	
DE	HCV DNAzyme substrate sequence #173.
XX	
XX	Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW	RNA stability; RNA expression; RNA synthesis; antisense;
KW	

```
ACC62853
ID ACC62853 standard; DNA; 17 BP.
XX
XX ACC62853;
XX
XX 01-JUL-2003 (first entry)
XX
XX Murine oligonucleotide associated with tumour supression, SEQ ID 100.
DE
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
XX tumour suppression; tumour reversion; apoptosis; virus resistance;
XX viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
XX schizophrenia; ss.
XX
XX Mus musculus.
OS
XX WO2003025176-A2.
XX
XX 27-MAR-2003.
XX
XX 17-SEP-2002; 2002WO-IB004210.
XX
XX 17-SEP-2001; 2001PR-00011979.
XX
XX (MOLE-) MOLECULAR ENGINES LAB.
XX
XX Telerman A, Anson R, Tuijnder M;
XX
XX WPI; 2003-333167/31.
XX
XX New isolated nucleic acid, useful for treating viral diseases associated
XX with tumors and cell degeneration, also related polypeptides, antibodies
XX and transfected cells.
XX
XX Disclosure; Page 116; 738pp; French.
XX
XX The present invention relates to murine oligonucleotides (ACC62754-
XX ACC6806), which are associated with tumour suppression, tumour
XX reversion, apoptosis and virus resistance. The oligonucleotides are
XX useful as (1) as probes and primers for detecting, identifying,
XX quantifying and/or amplifying nucleic acid, e.g. as one component of a
XX gene chip; in vitro as (anti)sense reagents; and (2) for production of
XX recombinant polypeptides. The oligonucleotides are useful for preparation
XX of pharmaceuticals for prevention and/or treatment of viral diseases that
XX are characterised by development of tumours or cell degeneration,
XX CC specifically cancer but also Alzheimer's disease and schizophrenia
XX
XX Sequence 17 BP; 5 A; 7 C; 1 G; 4 T; 0 U; 0 Other;
XX
XX Disclosure; Page 42; 738pp; French.
XX
XX The present invention relates to murine oligonucleotides (ACC62754-
XX ACC6806), which are associated with tumour suppression, tumour
XX reversion, apoptosis and virus resistance. The oligonucleotides are
XX useful as (1) as probes and primers for detecting, identifying,
XX quantifying and/or amplifying nucleic acid, e.g. as one component of a
XX gene chip; in vitro as (anti)sense reagents; and (2) for production of
XX recombinant polypeptides. The oligonucleotides are useful for preparation
XX of pharmaceuticals for prevention and/or treatment of viral diseases that
XX are characterised by development of tumours or cell degeneration,
XX CC specifically cancer but also Alzheimer's disease and schizophrenia
XX
XX Sequence 17 BP; 5 A; 7 C; 1 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 13.8; DB 1; Length 17;
XX Best Local Similarity 88.2%; Pred. No. 2.1e+02;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1610 GATCATCGCTCACCACA 1626
XX 1 GATCATCTCTCACCACA 17
XX
XX RESULT 304
XX ACC63485/C
XX ID ACC63485 standard; DNA; 17 BP.
XX
XX ACC63485;
XX
XX 01-JUL-2003 (first entry)
XX
XX Murine oligonucleotide associated with tumour supression, SEQ ID 732.
DE
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
XX tumour suppression; tumour reversion; apoptosis; virus resistance;
XX viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
XX schizophrenia; ss.
XX
XX Mus musculus.
OS
XX WO2003025176-A2.
XX
XX 27-MAR-2003.
XX
XX 17-SEP-2002; 2002WO-IB004210.
XX
XX 17-SEP-2001; 2001PR-00011979.
XX
XX (MOLE-) MOLECULAR ENGINES LAB.
XX
XX Telerman A, Anson R, Tuijnder M;
XX
XX WPI; 2003-333167/31.
XX
XX New isolated nucleic acid, useful for treating viral diseases associated
XX with tumors and cell degeneration, also related polypeptides, antibodies
XX and transfected cells.
XX
XX Disclosure; Page 116; 738pp; French.
XX
XX The present invention relates to murine oligonucleotides (ACC62754-
XX ACC6806), which are associated with tumour suppression, tumour
XX reversion, apoptosis and virus resistance. The oligonucleotides are
XX useful as (1) as probes and primers for detecting, identifying,
XX quantifying and/or amplifying nucleic acid, e.g. as one component of a
XX gene chip; in vitro as (anti)sense reagents; and (2) for production of
XX recombinant polypeptides. The oligonucleotides are useful for preparation
XX of pharmaceuticals for prevention and/or treatment of viral diseases that
XX are characterised by development of tumours or cell degeneration,
XX CC specifically cancer but also Alzheimer's disease and schizophrenia
XX
XX Sequence 17 BP; 5 A; 7 C; 1 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 13.8; DB 1; Length 17;
XX Best Local Similarity 88.2%; Pred. No. 2.1e+02;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1610 GATCATCGCTCACCACA 1626
XX 1 GATCATCTCTCACCACA 17
XX
XX RESULT 304
XX ACC63485/C
XX ID ACC63485 standard; DNA; 17 BP.
XX
XX ACC63485;
XX
XX 01-JUL-2003 (first entry)
XX
XX Murine oligonucleotide associated with tumour supression, SEQ ID 732.
DE
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
XX tumour suppression; tumour reversion; apoptosis; virus resistance;
XX viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
XX schizophrenia; ss.
XX
XX Mus musculus.
OS
XX WO2003025176-A2.
XX
XX 27-MAR-2003.
XX
XX 17-SEP-2002; 2002WO-IB004210.
XX
XX 17-SEP-2001; 2001PR-00011979.
XX
XX (MOLE-) MOLECULAR ENGINES LAB.
XX
XX Telerman A, Anson R, Tuijnder M;
XX
XX WPI; 2003-333167/31.
XX
XX New isolated nucleic acid, useful for treating viral diseases associated
XX with tumors and cell degeneration, also related polypeptides, antibodies
XX and transfected cells.
XX
XX Disclosure; Page 116; 738pp; French.
XX
XX The present invention relates to murine oligonucleotides (ACC62754-
XX ACC6806), which are associated with tumour suppression, tumour
XX reversion, apoptosis and virus resistance. The oligonucleotides are
XX useful as (1) as probes and primers for detecting, identifying,
XX quantifying and/or amplifying nucleic acid, e.g. as one component of a
XX gene chip; in vitro as (anti)sense reagents; and (2) for production of
XX recombinant polypeptides. The oligonucleotides are useful for preparation
XX of pharmaceuticals for prevention and/or treatment of viral diseases that
XX are characterised by development of tumours or cell degeneration,
XX CC specifically cancer but also Alzheimer's disease and schizophrenia
XX
XX Sequence 17 BP; 5 A; 7 C; 1 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 13.8; DB 1; Length 17;
XX Best Local Similarity 88.2%; Pred. No. 2.1e+02;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 28 CAGTTGCCCTTAGGCATC 44
XX 17 CAGTTGCCCTTAGGCATC 1
XX
XX RESULT 305
XX ADB39944
XX ID ADB39944 standard; DNA; 17 BP.
XX
XX ADB39944;
XX
XX 18-DEC-2003 (revised)
XX 04-DEC-2003 (first entry)
XX
XX Tumour suppression/reversion associated nucleotide #267.
XX
XX cyostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
XX primer; probe; tumour suppression; tumour reversion; apoptosis;
XX virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
XX diagnosis.
XX
XX Homo sapiens.
OS
XX WO2003040369-A2.
XX
XX 15-MAY-2003.
XX
XX 17-SEP-2002; 2002WO-IB004219.
XX
XX 17-SEP-2001; 2001PR-00011981.
XX
XX (MOLE-) MOLECULAR ENGINES LAB.
XX
XX Telerman A, Anson R, Tuijnder M;
XX
```

```
XX WPI; 2003-441574/41.
XX
XX New nucleic acid encoding human prostate membrane-specific antigen,
PT useful e.g. for treatment of tumors and viral infection, also related
PT polypeptide and antibodies.
XX
XX Disclosure; Page 63; 771pp; French.
XX
XX The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC sense and antisense sequences, of nucleotides involved in tumour
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal
CC expression of the nucleotides.
XX
XX Sequence 17 BP; 1 A; 4 C; 2 G; 10 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.1e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 161 GATCTTCTCATGCTTTC 177
DB 1 GATCTTCTCTGTTTC 17

RESULT 306
ADB44598/c
ID ADB44598 standard; DNA; 17 BP.
XX
XX ADB44598;
AC
XX
XX 18-DEC-2003 (first entry)
DT
XX
XX Tumour suppression/reversion associated nucleotide #4921.
DE
XX
XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.
XX
XX Homo sapiens.
OS
XX
XX WO2003040369-A2.
PN
XX
XX 15-MAY-2003.
PD
XX
XX 17-SEP-2002; 2002WO-IB004219.
PF
XX
XX 17-SEP-2001; 2001PR-00011981.
PR
XX
XX (MOLE-) MOLECULAR ENGINES LAB.
PA
XX
XX Telerman A, Amson R, Tuijnder M;
PI
XX
XX WPI; 2003-441574/41.
DR
XX
XX New nucleic acid encoding human prostate membrane-specific antigen,
PT
```

```
PT useful e.g. for treatment of tumors and viral infection, also related
PT polypeptide and antibodies.
XX
XX Disclosure; Page 607; 771pp; French.
XX
XX The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC sense and antisense sequences, of nucleotides involved in tumour
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal
CC expression of the nucleotides.
XX
XX Sequence 17 BP; 3 A; 5 C; 2 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.1e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1597 AGATGCTGGTAAGATC 1613
DB 17 AGATACTGGAAAGATC 1

RESULT 307
ADF64255/c
ID ADF64255 standard; DNA; 17 BP.
XX
XX ADF64255;
AC
XX
XX 12-FEB-2004 (first entry)
DT
XX
XX Human PCCP1 DNA fragment SEQ ID 8-directed probe - SEQ ID 2159.
DE
XX
XX chromatin organisation modifier; CHROMO domain; cytostatic; PCCP1;
KW prostate cancer candidate protein 1; tumour; gene therapy; vaccine;
KW human; ss; probe.
XX
XX Homo sapiens.
OS
XX
XX WO2003050284-A1.
PN
XX
XX 19-JUN-2003.
PD
XX
XX 22-NOV-2002; 2002WO-US037506.
PF
XX
XX 10-DEC-2001; 2001US-0339764P.
PR
XX
XX (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
PA
XX
XX Guo J;
PI
XX
XX WPI; 2003-532916/50.
DR
XX
XX New prostate cancer candidate protein 1 (PCCP1), useful for preparing a
PT composition for treating or preventing a disorder associated with
PT decreased or increased expression or activity of PCCP1 e.g., tumor.
XX
XX Example 2; SEQ ID NO 2159; 164pp; English.
XX
```

CC The invention relates to a novel isolated nucleic acid that encodes a  
CC protein with a chromatin organisation modifier (CHROMO) domain. The  
CC polynucleotide of the invention demonstrates cytostatic activity and may  
CC be useful for preparing a composition for treating or preventing a  
CC disorder associated with decreased or increased expression or activity of  
CC PCP1 (prostate cancer candidate protein 1), such as a tumour, as well as  
CC during gene therapy and vaccine production procedures. The current  
CC sequence is that of the human PCP1-related DNA fragment SEQ ID 8-  
CC directed probe of the invention. Note: The current sequence is not shown  
CC within the specification per se but was retrieved from the Wipoweb  
CC database.  
XX  
SQ Sequence 17 BP; 2 A; 7 C; 1 G; 7 T; 0 U; 0 Other;  
  
Query Match 0.7%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.1e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 208 TGAAGAGGGATTAAAG 224  
Db 17 TGAAGAGGGAGTCAAG 1  
|||||  
|  
  
RESULT 308  
ADI49238  
ID ADI49238 standard; DNA; 17 BP.  
AC ADI49238;  
XX  
DT 15-APR-2004 (first entry)  
XX  
DE Human tumour suppression/reversion-related DNA sequence SeqID1741.  
XX  
KW tumour suppression; tumour reversion; apoptosis; virus resistance;  
KW cytostatic; virucide; neuroprotective; nontropic; neuroleptic; probe;  
KW primer; PCR; gene chip; antisense; viral disease; tumour;  
KW cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human.  
XX  
OS Homo sapiens.  
XX  
PN WO2003025177-A2.  
XX  
PD 27-MAR-2003.  
XX  
PF 17-SEP-2002; 2002WO-IB004523.  
XX  
PR 17-SEP-2001; 2001FR-00011980.  
XX  
PA (MOLE-) MOLECULAR ENGINES LAB.  
XX  
PI Telerman A, Amson R, Tuijnder M;  
XX  
DR WPI; 2003-313354/30.  
XX  
PT New isolated nucleic acid, useful for treating viral diseases associated  
PT with tumors and cell degeneration, also related polypeptides, antibodies  
PT and transfected cells.  
XX  
PS Disclosure; SEQ ID NO 1741; 30pp; French.  
XX  
CC This invention relates to novel isolated nucleic acid sequences involved  
CC in the phenomena of tumour suppression, tumour reversion, apoptosis  
CC and/or resistance to viruses. The invention may be useful for the  
CC development of compounds with a cytostatic, virucide, neuroprotective,  
CC nontropic or neuroleptic activity. The DNA sequences may be useful as  
CC probes and primers for detecting, identifying, quantifying and/or  
CC amplifying nucleic acid, for example as one component of a gene chip, in  
CC vitro as antisense reagents and for production of recombinant  
CC polypeptides. The invention may therefore be useful for preparation of  
CC pharmaceuticals for prevention and/or treatment of viral diseases that  
CC are characterised by development of tumours or cell degeneration,  
CC specifically cancer but also Alzheimer's disease and schizophrenia. The  
CC present sequence is that of a nucleic acid sequence of the invention.

CC Note: The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/publishedpct\_sequences  
XX  
SQ Sequence 17 BP; 3 A; 4 C; 3 G; 7 T; 0 U; 0 Other;  
  
Query Match 0.7%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.1e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 161 GATCTTCTCATGCTTTC 177  
Db 1 GATCTGCTAATGCTTTC 17  
|||||  
|  
  
RESULT 309  
ADI47809  
ID ADI47809 standard; DNA; 17 BP.  
AC ADI47809;  
XX  
DT 15-APR-2004 (first entry)  
XX  
DE Human tumour suppression/reversion-related DNA sequence SeqID112.  
XX  
KW tumour suppression; tumour reversion; apoptosis; virus resistance;  
KW cytostatic; virucide; neuroprotective; nontropic; neuroleptic; probe;  
KW primer; PCR; gene chip; antisense; viral disease; tumour;  
KW cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human.  
XX  
OS Homo sapiens.  
XX  
PN WO2003025177-A2.  
XX  
PD 27-MAR-2003.  
XX  
PF 17-SEP-2002; 2002WO-IB004523.  
XX  
PR 17-SEP-2001; 2001FR-00011980.  
XX  
PA (MOLE-) MOLECULAR ENGINES LAB.  
XX  
PI Telerman A, Amson R, Tuijnder M;  
XX  
DR WPI; 2003-313354/30.  
XX  
PT New isolated nucleic acid, useful for treating viral diseases associated  
PT with tumors and cell degeneration, also related polypeptides, antibodies  
PT and transfected cells.  
XX  
PS Disclosure; SEQ ID NO 312; 30pp; French.  
XX  
CC This invention relates to novel isolated nucleic acid sequences involved  
CC in the phenomena of tumour suppression, tumour reversion, apoptosis  
CC and/or resistance to viruses. The invention may be useful for the  
CC development of compounds with a cytostatic, virucide, neuroprotective,  
CC nontropic or neuroleptic activity. The DNA sequences may be useful as  
CC probes and primers for detecting, identifying, quantifying and/or  
CC amplifying nucleic acid, for example as one component of a gene chip, in  
CC vitro as antisense reagents and for production of recombinant  
CC polypeptides. The invention may therefore be useful for preparation of  
CC pharmaceuticals for prevention and/or treatment of viral diseases that  
CC are characterised by development of tumours or cell degeneration,  
CC specifically cancer but also Alzheimer's disease and schizophrenia. The  
CC present sequence is that of a nucleic acid sequence of the invention.  
CC Note: The sequence data for this patent did not form part of the printed  
CC specification, but was obtained in electronic format directly from WIPO  
CC at ftp.wipo.int/pub/publishedpct\_sequences  
XX  
SQ Sequence 17 BP; 1 A; 4 C; 2 G; 10 T; 0 U; 0 Other;  
  
Query Match 0.7%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.1e+02;

```
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 161 GATCTTCTCATGCTTTC 177
Db 1 GATCTTCTTCTGTTTC 17

RESULT 310
ADH79302
ID ADH79302 standard; DNA; 17 BP.
XX
AC ADH79302;
XX
XX 22-APR-2004 (first entry)
DE Little tunny probe SEQ ID NO:107.
XX
KW RNA T7 polymerase; probe; array; ss; probe; little tunny.
XX
OS Euthynnus alletteratus.
XX
PN FR2834521-A1.
XX
XX
PD 11-JUL-2003.
XX
PF 10-JAN-2002; 2002FR-00000265.
XX
PR 10-JAN-2002; 2002FR-00000265.
XX
PA (INMR ) BIO MERIEUX.
PI
PI Mabilat C, Desvarenne S, Babola O, Lacroix B;
XX
XX WPI; 2003-571829/54.
XX
XX Determining origin of an animal sample, useful e.g. for detecting
PT adulteration of food, by testing hybridization of sample DNA with set
PT species-specific reagents.
XX
PS Claim 1; SEQ ID NO 107; 98pp; French.
XX
XX The invention relates to a novel method for determining the animal
CC species that is the origin of a sample. The method is very general, quick
CC and easy to do. It can detect material from a species even when present
CC in small amounts in presence of materials from several other species, and
CC the species being tested do not have to be known a priori. DNA was
CC isolated from an animal sample and amplified by PCR using two primers.
CC The amplicon, containing a promoter for RNA T7 polymerase (present in one
CC of the primers) was transcribed with incorporation of a fluorescent
CC ribonucleotide, then transcripts cleaved to fragments of 20 nucleotides.
CC These were tested for hybridisation to a DNA chip carrying 17-mer capture
CC probes, specific for different animal species. The present sequence
CC represents a probe of the invention.
XX
SQ Sequence 17 BP; 2 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.1e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 449 GGGCTGTTGCTGCAAT 465
Db 1 GGCCTGTTCTCGCAAT 17

RESULT 311
ACC51806/c
ID ACC51806 standard; DNA; 17 BP.
XX
AC ACC51806;
XX
XX 27-JUN-2003 (first entry)
XX
```

```
DE Human tumour suppressor sequence #573.
XX
KW ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
KW tumour regression; apoptosis; virus resistance; diagnosis;
KW cellular degeneration.
XX
OS Homo sapiens.
XX
PN FR2826373-A1.
XX
PD 27-DEC-2002.
XX
XX 20-JUN-2001; 2001FR-00008139.
XX
PR 20-JUN-2001; 2001FR-00008139.
XX
XX (MOLE-) MOLECULAR ENGINES LAB SA.
PA
PI Tuijnder M, Telerman A, Anson R;
XX
XX WPI; 2003-250498/25.
XX
XX New nucleic acid sequences associated with tumor suppression, regression,
PT apoptosis or virus resistance are useful to diagnose and treat viral
PT disease, development of tumor cells and cell degeneration.
XX
PS Claim 1; Page 173; 798pp; French.
XX
XX This sequence represents an isolated nucleic acid sequence associated
CC with tumour suppression or regression, apoptosis or virus resistance. The
CC invention relates to these sequences or sequences having at least 80%
CC identity to them, and polypeptides encoded by the sequences or
CC polypeptides having 80% identity to the polypeptide sequences. The
CC invention is used to diagnose or treat viral disease or disease
CC characterized by development of tumour cells or cellular degeneration
XX
SQ Sequence 17 BP; 8 A; 2 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.1e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 148 TTTCATTCTCTGATC 164
Db 17 TTTCATTCTCTGATC 1

RESULT 312
ADL47161
ID ADL47161 standard; RNA; 17 BP.
XX
AC ADL47161;
XX
XX 20-MAY-2004 (first entry)
XX
XX Human NOGO receptor zinzyme substrate sequence #148.
XX
XX antisense oligonucleotide; neurite growth inhibitor; NOGO;
KW prostaglandin D2 receptor; PTGDR; Ikappab kinase; IKK;
KW protein kinase PKR; cerebrovascular accident;
KW central nervous system injury; CNS injury; spinal cord injury; cancer;
KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
KW restenosis; asthma; Crohn's disease; diabetes; obesity;
KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
KW allergy; asthma; allergic rhinitis; atopic dermatitis;
XX NOGO receptor zinzyme; substrate; ds.
XX
OS Unidentified.
XX
XX WO200281628-A2.
XX
PD 17-OCT-2002.
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XX 03-APR-2002; 2002WO-US010512.
XX
XX 05-APR-2001; 2001US-00827395.
XX
PR 29-MAY-2001; 2001US-0294412P.
PR
PR 28-AUG-2001; 2001US-0315315P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;
XX
XX WPI; 2003-058513/05.
XX
XX Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
XX Claim 9; SEQ ID NO 694; 317pp; English.
XX
XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC nucleic acids of the invention are also useful for down-regulating the
CC expression of a target gene and as a diagnostic tool to examine genetic
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human NOGO
CC receptor zinyne substrate sequence.
XX
XX Sequence 17 BP; 0 A; 8 C; 4 G; 0 T; 5 U; 0 Other;
SQ
Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 64.7%; Pred. No. 2.1e+02;
Matches 11; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
QY 973 GTTCCGGCGGTACCCCT 989
DB 1 GUUCCGGCGGCUCCUCCU 17
: : : : : : : : : : : : : : : : : :
: : : : : : : : : : : : : : : : : :
RESULT 313
ADL50164/c
ID ADL50164 standard; RNA; 17 BP.
XX
XX ADL50164;
XX
XX 20-MAY-2004 (first entry)
XX
XX Human PKR substrate sequence #1278.
XX
XX antisense oligonucleotide; neurite growth inhibitor; NOGO;
KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
KW protein kinase PKR; cerebrovascular accident;
KW central nervous system injury; CNS injury; spinal cord injury; cancer;
KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
KW restenosis; asthma; Crohn's disease; diabetes; obesity;
KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
KW allergy; asthma; allergic rhinitis; atopic dermatitis; human PKR;
KW substrate; ds.
XX
XX Unidentified.
XX
XX WO200281628-A2.
XX
XX 17-OCT-2002.
XX
QY 800 TAGGCTTGGAGAAATT 816
DB 17 TAGCTTTGGAGAAAT 1
: : : : : : : : : : : : : : : : : :
: : : : : : : : : : : : : : : : : :
RESULT 314
ADL50176
ID ADL50176 standard; RNA; 17 BP.
XX
XX ADL50176;
XX
XX 20-MAY-2004 (first entry)
XX
XX Human PKR substrate sequence #1290.
XX
XX antisense oligonucleotide; neurite growth inhibitor; NOGO;
KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
KW protein kinase PKR; cerebrovascular accident;
KW central nervous system injury; CNS injury; spinal cord injury; cancer;
KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
KW restenosis; asthma; Crohn's disease; diabetes; obesity;
KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
KW allergy; asthma; allergic rhinitis; atopic dermatitis; human PKR;
KW substrate; ds.
XX
XX Unidentified.
XX
XX WO200281628-A2.
XX
XX 17-OCT-2002.
XX

```





CC from mouse, hamster, sheep, pig, rabbit, and cow. Preferably, the cell is  
 CC a mouse cell chosen from blastomere cell, eight-cell embryo cell,  
 CC blastocoe cell, mid gestation cell, embryo cell, or an embryonic stem  
 CC cell. A modified oligonucleotide is useful for treating a medical  
 CC condition, where the living cell of an animal (preferably, human) is  
 CC contacting with a modified oligonucleotide to produce a modified cell.  
 CC The person may be suffering from a genetic disease such as severe  
 CC combined immunodeficiency associated with adenosine deaminase deficiency,  
 CC familial hypercholesterolemia, Gaucher disease and Lesch-Nyhan syndrome.  
 CC (M2) is useful for determining the effect of mutation on the cell, or for  
 CC treating a medical condition. (M2) is also useful for generating  
 CC transgenic cells or transgenic animals that are useful as models of  
 CC diseases and for screening therapeutic reagents and for targeted  
 CC recombination for the purpose of producing gene knock-out organisms  
 CC and/or of replacement of defective genes with non-defective genes. The  
 CC method is also useful for determining the function of a gene of unknown  
 CC function. The method is efficient in enhancing mutation and/or  
 CC recombination rates in cell lines, tissues, and organisms. The method  
 CC allows targeting a mutation to an intracellular gene sequence at an  
 CC increased efficiency. This sequence represents a triplex helix forming  
 CC oligonucleotide that can be used to introduce mutations into a cell  
 CC genome.  
 XX  
 SQ Sequence 17 BP; 0 A; 4 C; 0 G; 13 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred. No. 2.1e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1652 AAAGAAAATAGAGAGA 1668  
 ||||| ||| |||||  
 Db 17 AAAGAGAAAAGAGAGA 1

RESULT 316

AD166858/C  
 ID AD166858 standard; DNA; 17 BP.

XX AC AD166858;

DT 15-APR-2004 (first entry)

XX Triple helix forming oligonucleotide AE-04.

XX cell therapy; modified oligonucleotide; S-phase; cell cycle; deletion;  
 KW insertion; substitution; strand break; adduct formation; gene conversion;  
 KW blastomere cell; eight-cell embryo cell; blastocoe cell;  
 KW mid gestation cell; embryo cell; embryonic stem cell;  
 KW severe combined immunodeficiency; adenosine deaminase deficiency;  
 KW familial hypercholesterolemia; Gaucher disease; Lesch-Nyhan syndrome;  
 KW transgenic; gene knock-out; thermal degradation study; ss;  
 KW triple helix forming oligonucleotide.

XX Synthetic.

XX Key Location/Qualifiers

FT modified\_base 1 /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 5-methyl uridine"  
 FT modified\_base 2  
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 FT /mod\_base= OTHER  
 FT /note= "OTHER= 5-methyl cytidine"  
 FT modified\_base 3..4  
 FT /\*tag= c  
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 FT /note= "OTHER= 5-methyl uridine"  
 FT modified\_base 5  
 FT /\*tag= d  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 5-methyl cytidine"  
 FT modified\_base 6..11

FT /\*tag= e  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 5-methyl uridine"  
 FT modified\_base 12  
 FT /\*tag= f  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 5-methyl cytidine"  
 FT modified\_base 13  
 FT /\*tag= g  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 5-methyl uridine"  
 FT modified\_base 14  
 FT /\*tag= h  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 5-methyl cytidine"  
 FT modified\_base 15  
 FT /\*tag= i  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 5-methyl uridine"  
 FT modified\_base 16  
 FT /\*tag= j  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 2'-aminoethoxy thymidine"  
 FT modified\_base 17  
 FT /\*tag= k  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 5-methyl uridine"  
 XX US2004009602-A1.  
 XX 15-JAN-2004.  
 XX 13-MAY-2003; 2003US-00438076.  
 XX 13-MAY-2002; 2002US-0378025P.  
 XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
 XX Seidman MM, Puri N, Majumdar A;  
 XX WPI; 2004-212739/20.  
 XX Modifying nucleotide sequence in genome of a cell e.g. human cell or a  
 XX fertilized egg cell of mouse, pig, or cow, by contacting cell in S-phase  
 XX of the cell cycle with a DNA modifying molecule that modifies nucleotide  
 XX sequence.  
 XX Example; SEQ ID NO 4; 59pp; English.  
 XX The invention describes a method of modifying (M1) a nucleotide sequence  
 XX in the genome of a cell. The method comprises providing a cell in S-phase  
 XX of the cell cycle, and contacting the cell with a DNA modifying molecule  
 XX (1) that modifies the nucleotide sequence. (M1) is useful for modifying a  
 XX nucleotide sequence in the genome of a cell such as a human cell or is a  
 XX fertilized egg cell from an animal chosen from mouse, hamster, sheep,  
 XX pig, rabbit, and cow. A second method is described (M2) useful for  
 XX mutating a nucleotide sequence in the genome of a cell, where the  
 XX mutating step comprises introducing a deletion, insertion, substitution,  
 XX strand break, adduct formation, gene conversion or recombination of a  
 XX novel sequence. The cell is a fertilized egg cell from an animal chosen  
 XX from mouse, hamster, sheep, pig, rabbit, and cow. Preferably, the cell is  
 XX a mouse cell chosen from blastomere cell, eight-cell embryo cell,  
 XX blastocoe cell, mid gestation cell, embryo cell, or an embryonic stem  
 XX cell. A modified oligonucleotide is useful for treating a medical  
 XX condition, where the living cell of an animal (preferably, human) is  
 XX contacting with a modified oligonucleotide to produce a modified cell.  
 XX The person may be suffering from a genetic disease such as severe  
 XX combined immunodeficiency associated with adenosine deaminase deficiency,  
 XX familial hypercholesterolemia, Gaucher disease and Lesch-Nyhan syndrome.  
 XX (M2) is useful for determining the effect of mutation on the cell, or for  
 XX treating a medical condition. (M2) is also useful for generating  
 XX transgenic cells or transgenic animals that are useful as models of  
 XX diseases and for screening therapeutic reagents and for targeted

CC recombination for the purpose of producing gene knock-out organisms  
CC and/or of replacement of defective genes with non-defective genes. The  
CC method is also useful for determining the function of a gene of unknown  
CC function. The method is efficient in enhancing mutation and/or  
CC recombination rates in cell lines, tissues, and organisms. The method  
CC allows targeting a mutation to an intracellular gene sequence at an  
CC increased efficiency. This sequence represents a triplex helix forming  
CC oligonucleotide that can be used to introduce mutations into a cell  
CC genome.  
XX  
SQ Sequence 17 BP; 0 A; 4 C; 0 G; 13 T; 0 U; 0 Other;  
Query Match 0.7%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.1e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1652 AAAGAAAATAAGAGA 1668  
Db 17 AAAGAGAAAATAAGAGA 1  
RESULT 317  
ADI66860/c  
ID ADI66860 standard; DNA; 17 BP.  
XX  
AC ADI66860;  
XX  
DT 15-APR-2004 (first entry)  
XX  
DE Triple helix forming oligonucleotide AB-06.  
XX  
KW cell therapy; modified oligonucleotide; S-phase; cell cycle; deletion;  
KW insertion; substitution; strand break; adduct formation; gene conversion;  
KW blastomere cell; eight-cell embryo cell; blastocoeal cell;  
KW mid gestation cell; embryo cell; embryonic stem cell;  
KW severe combined immunodeficiency; adenosine deaminase deficiency;  
KW familial hypercholesterolaemia; Gaucher disease; Lesch-Nyhan syndrome;  
KW transgenic; gene knock-out; thermal degradation study; ss;  
KW triple helix forming oligonucleotide.  
XX  
OS Synthetic.  
XX  
FH Key  
FH modified\_base 1 Location/Qualifiers  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER= Psoralen, 5-methyl uridine"  
FT modified\_base 2  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "OTHER= 5-methyl cytidine"  
FT modified\_base 3. .4  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "OTHER= 5-methyl uridine"  
FT modified\_base 5  
FT /\*tag= d  
FT /mod\_base= OTHER  
FT /note= "OTHER= 5-methyl cytidine"  
FT modified\_base 6. .11  
FT /\*tag= e  
FT /mod\_base= OTHER  
FT /note= "OTHER= 5-methyl uridine"  
FT modified\_base 12  
FT /\*tag= f  
FT /mod\_base= OTHER  
FT /note= "OTHER= 5-methyl cytidine"  
FT modified\_base 13  
FT /\*tag= g  
FT /mod\_base= OTHER  
FT /note= "OTHER= 5-methyl uridine"  
FT modified\_base 14  
FT /\*tag= h

FT /mod\_base= OTHER  
FT /note= "OTHER= 2'-aminoethoxy cytidine"  
FT modified\_base 15  
FT /\*tag= i  
FT /mod\_base= OTHER  
FT /note= "OTHER= 2'-aminoethoxy thymidine"  
FT modified\_base 16  
FT /\*tag= j  
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FT /note= "OTHER= 2'-aminoethoxy thymidine"  
FT modified\_base 17  
FT /\*tag= k  
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FT /note= "OTHER= 5-methyl uridine"  
XX  
PN US2004009602-A1.  
XX  
PD 15-JAN-2004.  
XX  
PF 13-MAY-2003; 2003US-00438076.  
XX  
PR 13-MAY-2002; 2002US-0378025P.  
XX  
PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
XX  
PI Seidman MM, Puri N, Majumdar A;  
XX  
PI WPI; 2004-212739/20.  
DR  
XX  
PT Modifying nucleotide sequence in genome of a cell e.g. human cell or a  
PT fertilized egg cell of mouse, pig, or cow, by contacting cell in S-phase  
PT of the cell cycle with a DNA modifying molecule that modifies nucleotide  
PT sequence.  
XX  
PS Example; SEQ ID NO 6; 59pp; English.  
XX  
CC The invention describes a method of modifying (M1) a nucleotide sequence  
CC in the genome of a cell. The method comprises providing a cell in S-phase  
CC of the cell cycle, and contacting the cell with a DNA modifying molecule  
CC (I) that modifies the nucleotide sequence. (M1) is useful for modifying a  
CC nucleotide sequence in the genome of a cell such as a human cell or is a  
CC fertilized egg cell from an animal chosen from mouse, hamster, sheep,  
CC pig, rabbit, and cow. A second method is described (M2) useful for  
CC mutating a nucleotide sequence in the genome of a cell, where the  
CC mutating step comprises introducing a deletion, insertion, substitution,  
CC strand break, adduct formation, gene conversion or recombination of a  
CC novel sequence. The cell is a fertilised egg cell from an animal chosen  
CC from mouse, hamster, sheep, pig, rabbit, and cow. Preferably, the cell is  
CC a mouse cell chosen from blastomere cell, eight-cell embryo cell,  
CC blastocoeal cell, mid gestation cell, embryo cell, or an embryonic stem  
CC cell. A modified oligonucleotide is useful for treating a medical  
CC condition, where the living cell of an animal (preferably, human) is  
CC contacting with a modified oligonucleotide to produce a modified cell.  
CC The person may be suffering from a genetic disease such as severe  
CC combined immunodeficiency associated with adenosine deaminase deficiency,  
CC familial hypercholesterolemia, Gaucher disease and Lesch-Nyhan syndrome.  
CC (M2) is useful for determining the effect of mutation on the cell, or for  
CC treating a medical condition. (M2) is also useful for generating  
CC transgenic cells or transgenic animals that are useful as models of  
CC diseases and for screening therapeutic reagents and for targeted  
CC recombination for the purpose of producing gene knock-out organisms  
CC and/or of replacement of defective genes with non-defective genes. The  
CC method is also useful for determining the function of a gene of unknown  
CC function. The method is efficient in enhancing mutation and/or  
CC recombination rates in cell lines, tissues, and organisms. The method  
CC allows targeting a mutation to an intracellular gene sequence at an  
CC increased efficiency. This sequence represents a triplex helix forming  
CC oligonucleotide that can be used to introduce mutations into a cell  
CC genome.  
XX  
SQ Sequence 17 BP; 0 A; 4 C; 0 G; 13 T; 0 U; 0 Other;  
Query Match 0.7%; Score 13.8; DB 1; Length 17;

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Best Local Similarity 88.2%; Pred. No. 2.1e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1652 AAAGAAAAAATAGAGA 1668
DB 17 AAAGAGAAAAAAGAGA 1

RESULT 318
ADI66859/C
ID ADI66859 standard; DNA; 17 BP.
XX
AC ADI66859;
XX
DT 15-APR-2004 (first entry)
XX
DE Triple helix forming oligonucleotide AB-05.
XX
KW cell therapy; modified oligonucleotide; S-phase; cell cycle; deletion;
KW insertion; substitution; strand break; adduct formation; gene conversion;
KW blastomere cell; eight-cell embryo cell; blastocoe cell;
KW mid gestation cell; embryo cell; embryonic stem cell;
KW severe combined immunodeficiency; adenosine deaminase deficiency;
KW familial hypercholesterolaemia; Gaucher disease; Lesch-Nyhan syndrome;
KW transgenic; gene knock-out; thermal degradation study; ss;
KW triple helix forming oligonucleotide.
OS Synthetic.
XX
FH Key Location/Qualifiers
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FT /mod_base= OTHER
FT /note= "OTHER= Psoralen, 5-methyl uridine"
FT modified_base 2
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= 5-methyl cytidine"
FT modified_base 3..4
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 5-methyl uridine"
FT modified_base 5
FT /*tag= d
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FT /note= "OTHER= 5-methyl cytidine"
FT modified_base 6..11
FT /*tag= e
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FT /note= "OTHER= 5-methyl uridine"
FT modified_base 12
FT /*tag= f
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FT /note= "OTHER= 5-methyl cytidine"
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FT /note= "OTHER= 5-methyl uridine"
FT modified_base 14
FT /*tag= h
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FT /note= "OTHER= 5-methyl cytidine"
FT modified_base 15
FT /*tag= i
FT /mod_base= OTHER
FT /note= "OTHER= 2'-aminoethoxy thymidine"
FT modified_base 16
FT /*tag= j
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FT /note= "OTHER= 2'-aminoethoxy thymidine"
FT modified_base 17
FT /*tag= k
FT /mod_base= OTHER

/Note= "OTHER= 5-methyl uridine"
US2004009602-A1.
15-JAN-2004.
13-MAY-2003; 2003US-00438076.
13-MAY-2002; 2002US-0378025P.
(USSH ) US DEPT HEALTH & HUMAN SERVICES.
Seidman MM, Puri N, Majumdar A;
WPI; 2004-212739/20.
Modifying nucleotide sequence in genome of a cell e.g. human cell or a
fertilized egg cell of mouse, pig, or cow, by contacting cell in S-phase
of the cell cycle with a DNA modifying molecule that modifies nucleotide
sequence.
Example; SEQ ID NO 5; 59pp; English.
The invention describes a method of modifying (M1) a nucleotide sequence
in the genome of a cell. The method comprises providing a cell in S-phase
of the cell cycle, and contacting the cell with a DNA modifying molecule
(I) that modifies the nucleotide sequence. (M1) is useful for modifying a
nucleotide sequence in the genome of a cell such as a human cell or is a
fertilised egg cell from an animal chosen from mouse, hamster, sheep,
pig, rabbit, and cow. A second method is described (M2) useful for
mutating a nucleotide sequence in the genome of a cell, where the
mutating step comprises introducing a deletion, insertion, substitution,
strand break, adduct formation, gene conversion or recombination of a
novel sequence. The cell is a fertilised egg cell from an animal chosen
from mouse, hamster, sheep, pig, rabbit, and cow. Preferably, the cell is
a mouse cell chosen from blastomere cell, eight-cell embryo cell,
blastocoe cell, mid gestation cell, embryo cell, or an embryonic stem
cell. A modified oligonucleotide is useful for treating a medical
condition, where the living cell of an animal (preferably, human) is
contacting with a modified oligonucleotide to produce a modified cell.
The person may be suffering from a genetic disease such as severe
combined immunodeficiency associated with adenosine deaminase deficiency,
familial hypercholesterolemia, Gaucher disease and Lesch-Nyhan syndrome.
(M2) is useful for determining the effect of mutation on the cell, or for
treating a medical condition. (M2) is also useful for generating
transgenic cells or transgenic animals that are useful as models of
diseases and for screening therapeutic reagents and for targeted
recombination for the purpose of producing gene knock-out organisms
and/or of replacement of defective genes with non-defective genes. The
method is also useful for determining the function of a gene of unknown
function. The method is efficient in enhancing mutation and/or
recombination rates in cell lines, tissues, and organisms. The method
allows targeting a mutation to an intracellular gene sequence at an
increased efficiency. This sequence represents a triplex helix forming
oligonucleotide that can be used to introduce mutations into a cell
genome.
Sequence 17 BP; 0 A; 4 C; 0 G; 13 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.1e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1652 AAAGAAAAAATAGAGA 1668
DB 17 AAAGAGAAAAAAGAGA 1

RESULT 319
ADI66867/C
ID ADI66867 standard; DNA; 17 BP.
XX
AC ADI66867;
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XX
DT 15-APR-2004 (first entry)
DE Triple helix forming oligonucleotide AE-02.
XX
XX cell therapy; modified oligonucleotide; S-phase; cell cycle; deletion;
XX insertion; substitution; strand break; adduct formation; gene conversion;
KW blastomere cell; eight-cell embryo cell; blastocoel cell;
KW mid gestation cell; embryo cell; embryonic stem cell;
KW severe combined immunodeficiency; adenosine deaminase deficiency;
KW familial hypercholesterolemia; Gaucher disease; Lesch-Nyhan syndrome;
KW transgenic; gene knock-out; thermal degradation study; ss;
KW triple helix forming oligonucleotide.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= Psoralen, 5-methyl uridine"
FT modified_base 2 /tag= b
FT /mod_base= OTHER
FT /note= "OTHER= 5-methyl cytidine"
FT modified_base 3..4
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 5-methyl uridine"
FT modified_base 5
FT /tag= d
FT /mod_base= OTHER
FT /note= "OTHER= 5-methyl cytidine"
FT modified_base 6..10
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FT /note= "OTHER= 5-methyl uridine"
FT modified_base 11
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FT /note= "OTHER= 2'-aminoethoxy thymidine"
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FT /note= "OTHER= 2'-aminoethoxy cytidine"
FT modified_base 13
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FT /note= "OTHER= 2'-aminoethoxy thymidine"
FT modified_base 14
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FT /note= "OTHER= 2'-aminoethoxy cytidine"
FT modified_base 15
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FT /note= "OTHER= 2'-aminoethoxy thymidine"
FT modified_base 16
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FT /mod_base= OTHER
FT /note= "OTHER= 2'-aminoethoxy thymidine"
FT modified_base 17
FT /tag= l
FT /mod_base= OTHER
FT /note= "OTHER= 5-methyl uridine"
FT
XX US2004009602-A1.
XX PN
XX PD 15-JAN-2004.
XX
XX 13-MAY-2003; 2003US-00438076.
XX PF
XX 13-MAY-2002; 2002US-0378025P.
XX PR
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XX
PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX Seidman MM, Puri N, Majumdar A;
XX WPI; 2004-212739/20.
DR
XX Modifying nucleotide sequence in genome of a cell e.g. human cell or a
XX fertilized egg cell of mouse, pig, or cow, by contacting cell in S-phase
XX of the cell cycle with a DNA modifying molecule that modifies nucleotide
XX sequence.
XX Example; SEQ ID NO 13; 59pp; English.
XX
XX The invention describes a method of modifying (M1) a nucleotide sequence
XX in the genome of a cell. The method comprises providing a cell in S-phase
XX of the cell cycle, and contacting the cell with a DNA modifying molecule
XX (I) that modifies the nucleotide sequence. (M1) is useful for modifying a
XX nucleotide sequence in the genome of a cell such as a human cell or is a
XX fertilized egg cell from an animal chosen from mouse, hamster, sheep,
XX pig, rabbit, and cow. A second method is described (M2) useful for
XX mutating a nucleotide sequence in the genome of a cell, where the
XX mutating step comprises introducing a deletion, insertion, substitution,
XX strand break, adduct formation, gene conversion or recombination of a
XX novel sequence. The cell is a fertilized egg cell from an animal chosen
XX from mouse, hamster, sheep, pig, rabbit, and cow. Preferably, the cell is
XX a mouse cell chosen from blastomere cell, eight-cell embryo cell,
XX blastocoel cell, mid gestation cell, embryo cell, or an embryonic stem
XX cell. A modified oligonucleotide is useful for treating a medical
XX condition, where the living cell of an animal (preferably, human) is
XX contacting with a modified oligonucleotide to produce a modified cell.
XX The person may be suffering from a genetic disease such as severe
XX combined immunodeficiency associated with adenosine deaminase deficiency,
XX familial hypercholesterolemia, Gaucher disease and Lesch-Nyhan syndrome.
XX (M2) is useful for determining the effect of mutation on the cell, or for
XX treating a medical condition. (M2) is also useful for generating
XX transgenic cells or transgenic animals that are useful as models of
XX diseases and for screening therapeutic reagents and for targeted
XX recombination for the purpose of producing gene knock-out organisms
XX and/or of replacement of defective genes with non-defective genes. The
XX method is also useful for determining the function of a gene of unknown
XX function. The method is efficient in enhancing mutation and/or
XX recombination rates in cell lines, tissues, and organisms. The method
XX allows targeting a mutation to an intracellular gene sequence at an
XX increased efficiency. This sequence represents a triplex helix forming
XX oligonucleotide that can be used to introduce mutations into a cell
XX genome.
XX
XX SQ Sequence 17 BP; 0 A; 4 C; 0 G; 13 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 13.8; DB 1; Length 17;
XX Best Local Similarity 88.2%; Pred. No. 2.1e+02;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1652 AAAGAAATAGAGA 1668
XX Db 17 AAAGAGAAAAAGAGA 1
XX
XX RESULT 320
XX ADI66864/c
XX ID ADI66864 standard; DNA; 17 BP.
XX
XX AC ADI66864;
XX
XX DT 15-APR-2004 (first entry)
XX
XX Triple helix forming oligonucleotide AE-18.
XX
XX cell therapy; modified oligonucleotide; S-phase; cell cycle; deletion;
XX insertion; substitution; strand break; adduct formation; gene conversion;
KW blastomere cell; eight-cell embryo cell; blastocoel cell;
KW mid gestation cell; embryo cell; embryonic stem cell;
KW severe combined immunodeficiency; adenosine deaminase deficiency;
KW familial hypercholesterolemia; Gaucher disease; Lesch-Nyhan syndrome;
KW transgenic; gene knock-out; thermal degradation study; ss;
KW triple helix forming oligonucleotide.
```

severe combined immunodeficiency; adenosine deaminase deficiency;  
familial hypercholesterolemia; Gaucher disease; Lesch-Nyhan syndrome;  
transgenic; gene knock-out; thermal degradation study; ss;  
triple helix forming oligonucleotide.

Synthetic.

Key Location/Qualifiers  
modified\_base 1  
/\*tag= a  
/mod\_base= OTHER  
/note= "OTHER= 2'-aminoethoxy thymidine"  
modified\_base 2  
/\*tag= b  
/mod\_base= OTHER  
/note= "OTHER= 5-methyl cytidine"  
modified\_base 3..4  
/\*tag= c  
/mod\_base= OTHER  
/note= "OTHER= 5-methyl uridine"  
modified\_base 5  
/\*tag= d  
/mod\_base= OTHER  
/note= "OTHER= 5-methyl cytidine"  
modified\_base 6..9  
/\*tag= e  
/mod\_base= OTHER  
/note= "OTHER= 5-methyl uridine"  
modified\_base 10  
/\*tag= f  
/mod\_base= OTHER  
/note= "OTHER= 5-methyl uridine"  
modified\_base 11  
/\*tag= g  
/mod\_base= OTHER  
/note= "OTHER= 2'-aminoethoxy thymidine"  
modified\_base 12  
/\*tag= h  
/mod\_base= OTHER  
/note= "OTHER= 5-methyl uridine"  
modified\_base 13  
/\*tag= i  
/mod\_base= OTHER  
/note= "OTHER= 5-methyl uridine"  
modified\_base 14  
/\*tag= j  
/mod\_base= OTHER  
/note= "OTHER= 5-methyl cytidine"  
modified\_base 15  
/\*tag= k  
/mod\_base= OTHER  
/note= "OTHER= 5-methyl uridine"  
modified\_base 16  
/\*tag= l  
/mod\_base= OTHER  
/note= "OTHER= 2'-aminoethoxy thymidine"  
modified\_base 17  
/\*tag= m  
/mod\_base= OTHER  
/note= "OTHER= 5-methyl uridine"

US2004009602-A1.

15-JAN-2004.

13-MAY-2003; 2003US-00438076.

13-MAY-2002; 2002US-0378025P.

(USSH ) US DEPT HEALTH & HUMAN SERVICES.

Seidman MM, Puri N, Majumdar A;

DR WPI; 2004-212739/20.  
XX Modifying nucleotide sequence in genome of a cell e.g. human cell or a  
PT fertilized egg cell of mouse, pig, or cow, by contacting cell in S-phase  
PT of the cell cycle with a DNA modifying molecule that modifies nucleotide  
PT sequence.  
XX  
PS Disclosure; SEQ ID NO 10; 59pp; English.  
XX  
CC The invention describes a method of modifying (M1) a nucleotide sequence  
CC in the genome of a cell. The method comprises providing a cell in S-phase  
CC of the cell cycle, and contacting the cell with a DNA modifying molecule  
CC (1) that modifies the nucleotide sequence. (M1) is useful for modifying a  
CC nucleotide sequence in the genome of a cell such as a human cell or is a  
CC fertilized egg cell from an animal chosen from mouse, hamster, sheep,  
CC pig, rabbit, and cow. A second method is described (M2) useful for  
CC mutating a nucleotide sequence in the genome of a cell, where the  
CC mutating step comprises introducing a deletion, insertion, substitution,  
CC strand break, adduct formation, gene conversion or recombination of a  
CC novel sequence. The cell is a fertilized egg cell from an animal chosen  
CC from mouse, hamster, sheep, pig, rabbit, and cow. Preferably, the cell is  
CC a mouse cell chosen from blastomere cell, eight-cell embryo cell,  
CC blastocoeal cell, mid gestation cell, embryo cell, or an embryonic stem  
CC cell. A modified oligonucleotide is useful for treating a medical  
CC condition, where the living cell of an animal (preferably, human) is  
CC contacting with a modified oligonucleotide to produce a modified cell.  
CC The person may be suffering from a genetic disease such as severe  
CC combined immunodeficiency associated with adenosine deaminase deficiency,  
CC familial hypercholesterolemia, Gaucher disease and Lesch-Nyhan syndrome.  
CC (M2) is useful for determining the effect of mutation on the cell, or for  
CC treating a medical condition. (M2) is also useful for generating  
CC transgenic cells or transgenic animals that are useful as models of  
CC diseases and for screening therapeutic reagents and for targeted  
CC recombination for the purpose of producing gene knock-out organisms  
CC and/or of replacement of defective genes with non-defective genes. The  
CC method is also useful for determining the function of a gene of unknown  
CC function. The method is efficient in enhancing mutation and/or  
CC recombination rates in cell lines, tissues, and organisms. The method  
CC allows targeting a mutation to an intracellular gene sequence at an  
CC increased efficiency. This sequence represents a triplex helix forming  
CC oligonucleotide that can be used to introduce mutations into a cell  
CC genome.  
XX  
SQ Sequence 17 BP; 0 A; 4 C; 0 G; 13 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.1e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1652 AAAGAAATAAGAGAGA 1668  
||||| ||| |||||  
Db 17 AAAGAGAAAAAAGAGAGA 1

RESULT 321  
AD166862/c  
ID AD166862 standard; DNA; 17 BP.

XX AC AD166862;

XX DT 15-APR-2004 (first entry)

XX DE Triple helix forming oligonucleotide AB-08.

XX cell therapy; modified oligonucleotide; S-phase; cell cycle; deletion;  
XX insertion; substitution; strand break; adduct formation; gene conversion;  
XX blastomere cell; eight-cell embryo cell; blastocoeal cell;  
XX mid gestation cell; embryo cell; embryonic stem cell;  
XX severe combined immunodeficiency; adenosine deaminase deficiency;  
XX familial hypercholesterolemia; Gaucher disease; Lesch-Nyhan syndrome;  
XX transgenic; gene knock-out; thermal degradation study; ss;  
XX triple helix forming oligonucleotide.

OS Synthetic.

XX Key Location/Qualifiers

XX modified\_base 1 /tag= a

FT /mod\_base= OTHER

FT /note= "OTHER= Psoralen, 5-methyl uridine"

FT modified\_base 2

FT /tag= b

FT /mod\_base= OTHER

FT /note= "OTHER= 5-methyl cytidine"

FT modified\_base 3..4

FT /tag= c

FT /mod\_base= OTHER

FT /note= "OTHER= 5-methyl uridine"

FT modified\_base 5

FT /tag= d

FT /mod\_base= OTHER

FT /note= "OTHER= 5-methyl cytidine"

FT modified\_base 6..11

FT /tag= e

FT /mod\_base= OTHER

FT /note= "OTHER= 5-methyl uridine"

FT modified\_base 12

FT /tag= f

FT /mod\_base= OTHER

FT /note= "OTHER= 5-methyl cytidine"

FT modified\_base 13

FT /tag= g

FT /mod\_base= OTHER

FT /note= "OTHER= 5-methyl uridine"

FT modified\_base 14

FT /tag= h

FT /mod\_base= OTHER

FT /note= "OTHER= 5-methyl cytidine"

FT modified\_base 15

FT /tag= i

FT /mod\_base= OTHER

FT /note= "OTHER= 2'-aminoethoxy thymidine"

FT modified\_base 16

FT /tag= j

FT /mod\_base= OTHER

FT /note= "OTHER= 2'-aminoethoxy thymidine"

FT modified\_base 17

FT /tag= k

FT /mod\_base= OTHER

FT /note= "OTHER= 2'-aminoethoxy thymidine"

FT XX

PN US2004009602-A1.

XX 15-JAN-2004.

XX 13-MAY-2003; 2003US-00438076.

XX 13-MAY-2002; 2002US-0378025P.

XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.

XX Seidman MM, Puri N, Majumdar A;

XX WPI; 2004-212739/20.

XX Modifying nucleotide sequence in genome of a cell e.g. human cell or a

PT fertilized egg cell of mouse, pig, or cow; by contacting cell in S-phase

PT of the cell cycle with a DNA modifying molecule that modifies nucleotide

PT sequence.

XX Example; SEQ ID NO 8; 59pp; English.

XX The invention describes a method of modifying (M1) a nucleotide sequence

CC in the genome of a cell. The method comprises providing a cell in S-phase

CC of the cell cycle, and contacting the cell with a DNA modifying molecule

CC (I) that modifies the nucleotide sequence. (M1) is useful for modifying a

CC nucleotide sequence in the genome of a cell such as a human cell or is a

CC fertilized egg cell from an animal chosen from mouse, hamster, sheep,

CC pig, rabbit, and cow. A second method is described (M2) useful for

CC mutating a nucleotide sequence in the genome of a cell, where the

CC mutating step comprises introducing a deletion, insertion, substitution,

CC strand break, adduct formation, gene conversion or recombination of a

CC novel sequence. The cell is a fertilized egg cell from an animal chosen

CC from mouse, hamster, sheep, pig, rabbit, and cow. Preferably, the cell is

CC a mouse cell chosen from blastomere cell, eight-cell embryo cell,

CC blastocoeel cell, mid gestation cell, embryo cell, or an embryonic stem

CC cell. A modified oligonucleotide is useful for treating a medical

CC condition, where the living cell of an animal (preferably, human) is

CC contacting with a modified oligonucleotide to produce a modified cell.

CC The person may be suffering from a genetic disease such as severe

CC combined immunodeficiency associated with adenosine deaminase deficiency,

CC familial hypercholesterolemia, Gaucher disease and Lesch-Nyhan syndrome.

CC (M2) is useful for determining the effect of mutation on the cell, or for

CC treating a medical condition. (M2) is also useful for generating

CC transgenic cells or transgenic animals that are useful as models of

CC diseases and for screening therapeutic reagents and for targeted

CC recombination for the purpose of producing gene knock-out organisms

CC and/or of replacement of defective genes with non-defective genes. The

CC method is also useful for determining the function of a gene of unknown

CC function. The method is efficient in enhancing mutation and/or

CC recombination rates in cell lines, tissues, and organisms. The method

CC allows targeting a mutation to an intracellular gene sequence at an

CC increased efficiency. This sequence represents a triplex helix forming

CC oligonucleotide that can be used to introduce mutations into a cell

CC genome.

XX

SQ Sequence 17 BP; 0 A; 4 C; 0 G; 13 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 2.1e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1652 AAAGAAAATAAGAGA 1668

Db 17 AAAGAGAAAAAAGAGA 1

RESULT 322

ADI66865/c

ID ADI66865 standard; DNA; 17 BP.

XX

AC ADI66865;

XX

DT 15-APR-2004 (first entry)

XX

DE Triple helix forming oligonucleotide AB-31.

XX

KW cell therapy; modified oligonucleotide; S-phase; cell cycle; deletion;

KW insertion; substitution; strand break; adduct formation; gene conversion;

KW blastomere cell; eight-cell embryo cell; blastocoeel cell;

KW mid gestation cell; embryo cell; embryonic stem cell;

KW severe combined immunodeficiency; adenosine deaminase deficiency;

KW familial hypercholesterolemia; Gaucher disease; Lesch-Nyhan syndrome;

KW transgenic; gene knock-out; thermal degradation study; ss;

KW triple helix forming oligonucleotide.

XX

OS Synthetic.

XX

XX Key Location/Qualifiers

FT modified\_base 1

FT /tag= a

FT /mod\_base= OTHER

FT /note= "OTHER= 5-methyl uridine"

FT modified\_base 2

FT /tag= b

FT /mod\_base= OTHER

FT /note= "OTHER= 5-methyl cytidine"

FT modified\_base 3..4

FT /tag= c



FT modified\_base /note= "OTHER= 5-methyl cytidine"  
FT 13 /tag= g  
FT /mod\_base= OTHER  
FT /note= "OTHER= 5-methyl uridine"  
FT 14  
FT modified\_base  
FT /tag= h  
FT /mod\_base= OTHER  
FT /note= "OTHER= 5-methyl cytidine"  
FT 15..17  
FT /tag= i  
FT /mod\_base= OTHER  
FT /note= "OTHER= 5-methyl uridine"

US2004009602-A1.

15-JAN-2004.

13-MAY-2003; 2003US-00438076.

13-MAY-2002; 2002US-0378025P.

(US\$S ) US DEPT HEALTH & HUMAN SERVICES.

Seidman MM, Puri N, Majumdar A;

WPI; 2004-212739/20.

Modifying nucleotide sequence in genome of a cell e.g. human cell or a fertilized egg cell of mouse, pig, or cow, by contacting cell in S-phase of the cell cycle with a DNA modifying molecule that modifies nucleotide sequence.

Example; SEQ ID NO 3; 59pp; English.

The invention describes a method of modifying (M1) a nucleotide sequence in the genome of a cell. The method comprises providing a cell in S-phase of the cell cycle, and contacting the cell with a DNA modifying molecule (I) that modifies the nucleotide sequence. (M1) is useful for modifying a nucleotide sequence in the genome of a cell such as a human cell or is a fertilized egg cell from an animal chosen from mouse, hamster, sheep, pig, rabbit, and cow. A second method is described (M2) useful for mutating a nucleotide sequence in the genome of a cell, where the mutating step comprises introducing a deletion, insertion, substitution, strand break, adduct formation, gene conversion or recombination of a novel sequence. The cell is a fertilized egg cell from an animal chosen from mouse, hamster, sheep, pig, rabbit, and cow. Preferably, the cell is a mouse cell chosen from blastomere cell, eight-cell embryo cell, blastocoele cell, mid gestation cell, embryo cell, or an embryonic stem cell. A modified oligonucleotide is useful for treating a medical condition, where the living cell of an animal (preferably human) is contacting with a modified oligonucleotide to produce a modified cell. The person may be suffering from a genetic disease such as severe combined immunodeficiency associated with adenosine deaminase deficiency, familial hypercholesterolemia, Gaucher disease and Lesch-Nyhan syndrome. (M2) is useful for determining the effect of mutation on the cell, or for treating a medical condition. (M2) is also useful for generating transgenic cells or transgenic animals that are useful as models of diseases and for screening therapeutic reagents and for targeted recombination for the purpose of producing gene knock-out organisms and/or of replacement of defective genes with non-defective genes. The method is also useful for determining the function of a gene of unknown function. The method is efficient in enhancing mutation and/or recombination rates in cell lines, tissues, and organisms. The method allows targeting a mutation to an intracellular gene sequence at an increased efficiency. This sequence represents a triplex helix forming oligonucleotide that can be used to introduce mutations into a cell genome.

Sequence 17 BP; 0 A; 4 C; 0 G; 13 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.1e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1652 AAAGAAAATAAGAGA 1668  
Db 17 AAAGAGAAAAAAGA 1

RESULT 324

ADI82912

ID ADI82912 standard; RNA; 17 BP.

XX AC ADI82912;

XX DT 03-JUN-2004 (first entry)

XX DE HCV DNzyme substrate sequence #158.

XX KW ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;

XX KW HCV infection; type I interferon; DNzyme.

XX OS Hepatitis C virus.

XX PN US2003125270-A1.

XX PD 03-JUL-2003.

XX PF 18-DEC-2000; 2000US-00740332.

XX PR 18-DEC-2000; 2000US-00740332.

XX PA (BLAT/) BLATT L.

XX PA (MCSW/) MCSWIGGEN J.

XX PA (ROBE/) ROBERTS E.

XX PA (PVC/) PAVCO P A.

XX PA (MACE/) MACEJACK D.

XX PI Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;

XX WPI; 2004-031273/03.

XX Enzymatic nucleic acid molecules which specifically cleave RNA derived from hepatitis C virus (HCV), useful for the treatment of HCV infections, especially in combination with type I interferon therapy.

XX Claim 1: SEQ ID NO 158; 198pp; English.

XX The invention relates to an enzymatic nucleic acid molecule which specifically cleaves RNA derived from hepatitis C virus (HCV), in which the binding arms of the enzymatic nucleic acid molecule comprises sequences complementary to any of the defined substrate sequences given in the specification. The nucleic acid molecule may be administered for the treatment of HCV infections, especially in combination with type I interferons. The present sequence represents a HCV DNzyme substrate sequence.

XX Sequence 17 BP; 4 A; 2 C; 6 G; 0 T; 5 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;

Best Local Similarity 58.8%; Pred. No. 2.1e+02;

Matches 10; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

QY 1603 TGGGTAAGATCATCGCT 1619

Db 1 UGGGTAAGGCAUCGUAU 17

RESULT 325

ADI82927

ID ADI82927 standard; RNA; 17 BP.

XX AC ADI82927;

XX DT 03-JUN-2004 (first entry)



```

XX DE HCV DNase substrate sequence #173.
XX PF
XX SS; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;
XX KW HCV infection; type I interferon; DNase.
XX OS
XX PN Hepatitis C virus.
XX PD US2003125270-A1.
XX PF 03-JUL-2003.
XX PR 18-DEC-2000; 2000US-00740332.
XX PR 18-DEC-2000; 2000US-00740332.
XX PA (BLAT/) BLATT L.
XX PA (NCSW/) MCSWIGGEN J.
XX PA (ROBE/) ROBERTS E.
XX PA (PAVC/) PAVCO P A.
XX PA (MACE/) MACEJACK D.
XX PI Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;
XX DR WPI; 2004-031273/03.
XX PR Enzymatic nucleic acid molecules which specifically cleave RNA derived
XX PT from hepatitis C virus (HCV), useful for the treatment of HCV infections,
XX PT especially in combination with type I interferon therapy.
XX PS Claim 1; SEQ ID NO 173; 198pp; English.
XX CC The invention relates to an enzymatic nucleic acid molecule which
XX CC specifically cleaves RNA derived from hepatitis C virus (HCV), in which
XX CC the binding arms of the enzymatic nucleic acid molecule comprises
XX CC sequences complementary to any of the defined substrate sequences given
XX CC in the specification. The nucleic acid molecule may be administered for
XX CC the treatment of HCV infections, especially in combination with type I
XX CC interferons. The present sequence represents a HCV DNase substrate
XX CC sequence.
XX SQ Sequence 17 BP; 0 A; 8 C; 5 G; 0 T; 4 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 64.7%; Pred. No. 2.1e+02;
Matches 11; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY 502 TTGGGCTCGTCAGGCC 518
DB 1 UUCGCGUCGCGGCC 17

RESULT 326
ADN44431/c
ID ADN44431 standard; DNA; 17 BP.
XX AC ADN44431;
XX DT 15-JUL-2004 (first entry)
XX DE Mutant cell identification-related mutagenic oligonucleotide SeqID1100.
XX KW cell identification; oligonucleotide-directed sequence alteration;
XX KW selectable phenotype; transgenic plant; herbicide resistance;
XX KW sterile plant; abiotic stress tolerance; albino plant;
XX KW amino acid production; ss.
XX OS Brassica napus.
XX OS Synthetic.
XX PN W02004033708-A2.
XX PD 22-APR-2004.

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XX 07-OCT-2003; 2003WO-US031862.
XX PR 07-OCT-2002; 2002US-0416983P.
XX PR 07-MAR-2003; 2003US-0453360P.
XX PA (UYDE ) UNIV DELAWARE.
XX PA (NAPR-) NAPRO BIO THERAPEUTICS INC.
XX PI Kmiec EB, Van Brabant A;
XX DR WPI; 2004-340941/31.
XX PR Identifying a cell with a desired oligonucleotide-directed sequence
XX PT alteration at a nucleic acid target site within the cell by identifying
XX PT the desired sequence alteration in cells selected for the presence of a
XX PT selectable phenotype.
XX PS Example 25; SEQ ID NO 1100; 303pp; English.
XX CC This invention relates to a novel method of identifying a cell having a
XX CC desired oligonucleotide-directed sequence alteration at a first nucleic
XX CC acid target site within the cell. The method comprises identifying the
XX CC desired sequence alteration in cells that have been selected for the
XX CC presence of a selectable phenotype conferred by a concurrent
XX CC oligonucleotide-directed sequence alteration at a second nucleic acid
XX CC target site within the cells. The method is useful in identifying a cell
XX CC having a desired oligonucleotide-directed sequence alteration at a first
XX CC nucleic acid target site within the cell. The method may be useful for
XX CC the production of plants with herbicide resistance, male or female
XX CC sterile plants, abiotic stress tolerance, albino plants or plants with
XX CC altered amino acid production as well as for use in mammalian cell lines.
XX CC The present sequence is that of a mutagenic oligonucleotide which was
XX CC used in the exemplification of the invention.
XX SQ Sequence 17 BP; 6 A; 6 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.1e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1890 TCAGCATGATGGCTGG 1906
DB 17 TCAGCTTGATGGCTGG 1

RESULT 327
ADN44430
ID ADN44430 standard; DNA; 17 BP.
XX AC ADN44430;
XX DT 15-JUL-2004 (first entry)
XX DE Mutant cell identification-related mutagenic oligonucleotide SeqID1099.
XX KW cell identification; oligonucleotide-directed sequence alteration;
XX KW selectable phenotype; transgenic plant; herbicide resistance;
XX KW sterile plant; abiotic stress tolerance; albino plant;
XX KW amino acid production; ss.
XX OS Brassica napus.
XX OS Synthetic.
XX PN W02004033708-A2.
XX PD 22-APR-2004.
XX PR 07-OCT-2003; 2003WO-US031862.
XX PR 07-OCT-2002; 2002US-0416983P.
XX PR 07-MAR-2003; 2003US-0453360P.
XX PD

```

PA (UYDE ) UNIV DELAWARE.  
 PA (NAPR-) NAPRO BIO THERAPEUTICS INC.  
 XX  
 PI Kniec EB, Van Brabant A;  
 XX  
 DR WPI; 2004-340941/31.  
 XX  
 XX Identifying a cell with a desired oligonucleotide-directed sequence  
 PT alteration at a nucleic acid target site within the cell by identifying  
 PT the desired sequence alteration in cells selected for the presence of a  
 PT selectable phenotype.  
 XX  
 XX Example 25; SEQ ID NO 1099; 303pp; English.  
 PS  
 XX This invention relates to a novel method of identifying a cell having a  
 CC desired oligonucleotide-directed sequence alteration at a first nucleic  
 CC acid target site within the cell. The method comprises identifying the  
 CC desired sequence alteration in cells that have been selected for the  
 CC presence of a selectable phenotype conferred by a concurrent  
 CC oligonucleotide-directed sequence alteration at a second nucleic acid  
 CC target site within the cells. The method is useful in identifying a cell  
 CC having a desired oligonucleotide-directed sequence alteration at a first  
 CC nucleic acid target site within the cell. The method may be useful for  
 CC the production of plants with herbicide resistance, male or female  
 CC sterile plants, abiotic stress tolerance, albino plants or plants with  
 CC altered amino acid production as well as for use in mammalian cell lines.  
 CC The present sequence is that of a mutagenic oligonucleotide which was  
 CC used in the exemplification of the invention.  
 XX  
 SQ Sequence 17 BP; 2 A; 3 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred.No. 2.1e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1890 TCAGCATGATGGGCTGG 1906  
 ||||| ||||| |||||  
 Db 1 TCAGCTTGATGGGCTGG 17

RESULT 328  
 ADI66866/c  
 ID ADI66866 standard; DNA; 17 BP.  
 XX  
 AC ADI66866;  
 XX  
 XX 16-DEC-2004 (first entry)  
 DT  
 DE Triple helix forming oligonucleotide AE-32.  
 XX  
 XX cell therapy; modified oligonucleotide; S-phase; cell cycle; deletion;  
 KW insertion; substitution; strand break; adduct formation; gene conversion;  
 KW blastomere cell; eight-cell embryo cell; blastocoel cell;  
 KW mid gestation cell; embryo cell; embryonic stem cell;  
 KW severe combined immunodeficiency; adenosine deaminase deficiency;  
 KW familial hypercholesterolemia; Gaucher disease; Leach-Nyhan syndrome;  
 KW transgenic; gene knock-out; thermal degradation study; ss;  
 KW triple helix forming oligonucleotide.  
 XX  
 OS Synthetic.  
 XX  
 XX Key Location/Qualifiers  
 FH modified\_base 1 /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 2'-aminoethoxy thymidine"  
 FT modified\_base 2  
 FT /\*tag= b  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 2'-aminoethoxy cytidine"  
 FT modified\_base 3  
 FT /\*tag= c  
 FT /mod\_base= OTHER

FT modified\_base 4  
 FT /\*tag= d  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 5-methyl uridine"  
 FT modified\_base 5  
 FT /\*tag= e  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 5-methyl cytidine"  
 FT modified\_base 6. .11 f  
 FT /\*tag= f  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 5-methyl uridine"  
 FT modified\_base 12  
 FT /\*tag= g  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 5-methyl cytidine"  
 FT modified\_base 13  
 FT /\*tag= h  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 5-methyl uridine"  
 FT modified\_base 14  
 FT /\*tag= i  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 5-methyl cytidine"  
 FT modified\_base 15. .17 j  
 FT /\*tag= j  
 FT /mod\_base= OTHER  
 FT /note= "OTHER= 5-methyl uridine"  
 FT  
 XX US2004009602-A1.  
 PN  
 XX 15-JAN-2004.  
 PD  
 XX 13-MAY-2003; 2003US-00438076.  
 PF  
 XX 13-MAY-2002; 2002US-0378025P.  
 PR  
 XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
 XX  
 XX Seidman MM, Puri N, Majumdar A;  
 PI WPI; 2004-212739/20.  
 DR  
 XX  
 XX Modifying nucleotide sequence in genome of a cell e.g. human cell or a  
 PT fertilized egg cell of mouse, pig, or cow, by contacting cell in S-phase  
 PT of the cell cycle with a DNA modifying molecule that modifies nucleotide  
 PT sequence.  
 XX  
 XX Disclosure; SEQ ID NO 12; 59pp; English.  
 PS  
 XX The invention describes a method of modifying (M1) a nucleotide sequence  
 CC in the genome of a cell. The method comprises providing a cell in S-phase  
 CC of the cell cycle, and contacting the cell with a DNA modifying molecule  
 CC (I) that modifies the nucleotide sequence. (M1) is useful for modifying a  
 CC nucleotide sequence in the genome of a cell such as a human cell or is a  
 CC fertilised egg cell from an animal chosen from mouse, hamster, sheep,  
 CC pig, rabbit, and cow. A second method is described (M2) useful for  
 CC mutating a nucleotide sequence in the genome of a cell, where the  
 CC mutating step comprises introducing a deletion, insertion, substitution,  
 CC strand break, adduct formation, gene conversion or recombination of a  
 CC novel sequence. The cell is a fertilised egg cell from an animal chosen  
 CC from mouse, hamster, sheep, pig, rabbit, and cow. Preferably, the cell is  
 CC a mouse cell chosen from blastomere cell, eight-cell embryo cell,  
 CC blastocoel cell, mid gestation cell, embryo cell, or an embryonic stem  
 CC cell. A modified oligonucleotide is useful for treating a medical  
 CC condition, where the living cell of an animal (preferably, human) is  
 CC contacting with a modified oligonucleotide to produce a modified cell.  
 CC The person may be suffering from a genetic disease such as severe  
 CC combined immunodeficiency associated with adenosine deaminase deficiency,  
 CC familial hypercholesterolemia, Gaucher disease and Leach-Nyhan syndrome.  
 CC (M2) is useful for determining the effect of mutation on the cell, or for  
 CC treating a medical condition. (M2) is also useful for generating

transgenic cells or transgenic animals that are useful as models of diseases and for screening therapeutic reagents and for targeted recombination for the purpose of producing gene knock-out organisms and/or of replacement of defective genes with non-defective genes. The method is also useful for determining the function of a gene of unknown function. The method is efficient in enhancing mutation and/or recombination rates in cell lines, tissues, and organisms. The method allows targeting a mutation to an intracellular gene sequence at an increased efficiency. This sequence represents a triplex helix forming oligonucleotide that can be used to introduce mutations into a cell genome.

Sequence 17 BP; 0 A; 4 C; 0 G; 13 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred. No. 2.1e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1652 AAAGAAAAAATAGAGAGA 1668  
 ||||| ||| |||||  
 Db 17 AAAGAGAAAAAAGAGAGA 1

RESULT 329  
 ADR75087  
 ID ADR75087 standard; DNA; 18 BP.  
 XX AC ADR75087;  
 XX  
 DT 16-DEC-2004 (first entry)  
 XX  
 DE Allele specific primer A for human stenosis associated marker hCV7481596.  
 XX Human; ss; PCR; primer; Allele specific primer; coronary stenosis;  
 KW angina; ischaemic chest pain; myocardial infarction;  
 KW sudden cardiac death; SNP; single nucleotide polymorphism.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2004081186-A2.  
 XX  
 PD 23-SEP-2004.  
 XX  
 PF 10-MAR-2004; 2004WO-US0007140.  
 XX  
 PR 10-MAR-2003; 2003US-0453050P.  
 PR 30-APR-2003; 2003US-0466437P.  
 XX  
 PA (APPL-) APPLERA CORP.  
 XX  
 PI Cargill M, Devlin JJ, Luke MM;  
 XX  
 DR WPI; 2004-668949/65.  
 XX  
 PT Identifying an individual who has altered risk for developing stenosis  
 PT comprises detecting single nucleotide polymorphism (SNP), in the  
 PT individual's nucleic acids.  
 XX  
 PS Claim 19; SEQ ID NO 68399; 146pp; English.  
 XX  
 CC The invention relates to identifying an individual who has altered risk  
 CC for developing coronary stenosis comprising detecting a single nucleotide  
 CC polymorphism (SNP) in any one of the 6703 nucleotide sequences (not  
 CC given in the specification), in the individual's nucleic acids, where the  
 CC presence of the SNP is correlated with an altered risk for stenosis in  
 CC the individual. Also included are an isolated nucleic acid molecule  
 CC (comprising at least 8 contiguous nucleotides where one of the  
 CC nucleotides is an SNP as cited above, or their complement), an isolated  
 CC polypeptide comprising an amino acid sequence selected from any of the  
 CC 696 amino acid sequences (not defined in the specification), an antibody  
 CC that specifically binds to the polypeptide (or its antigen-binding  
 CC fragment), an amplified polynucleotide containing the SNP as cited (where  
 CC the amplified polynucleotide is between about 16 and about 1,000

nucleotides in length), an isolated polynucleotide which specifically hybridizes to a nucleic acid molecule containing the SNP, a kit for detecting a SNP in a nucleic acid, detecting a SNP in a nucleic acid molecule, detecting a variant polypeptide and identifying an agent useful in therapeutically or prophylactically treating stenosis. The detection step of the method is carried out by a process selected from allele-specific probe hybridisation, allele-specific primer extension, allele-specific amplification, sequencing, 5' nuclease digestion, molecular beacon assay, oligonucleotide ligation assay, size analysis, and single-stranded conformation polymorphism. The method is useful for identifying an individual who has altered risk for developing coronary stenosis, which can lead to angina (ischaemic chest pain), myocardial infarction and ultimately sudden cardiac death. The present sequence is an allele specific primer for amplifying a SNP-containing region of a human marker gene associated with stenosis. NOTE: SEQ ID 1-67771 are not shown in the specification but are provided on a CD-R named CL001510CDR which was not supplied with the specification.

Sequence 18 BP; 2 A; 8 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 18;  
 Best Local Similarity 88.2%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1148 CACCTTTTGGTCTCTCT 1164  
 ||||| ||||| |||||  
 Db 2 CACCTCATGCTCTCTCT 18

RESULT 330  
 AAQ51818  
 ID AAQ51818 standard; RNA; 18 BP.  
 XX AC AAQ51818;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 26-MAY-1994 (first entry)  
 XX  
 DE mdr-1 mRNA ribozyme cleavable nucleotide NT497.  
 XX  
 KW Multiple drug resistance; mdr-1; ribozyme; membrane protein; liver;  
 KW resistance; chemotherapeutic agent; colchicine; doxorubicin; colon;  
 KW actinomycin D; vinblastine; small intestine; kidney; adrenal gland;  
 KW adenocarcinoma; bowel; transformed phenotype; promyelocytic leukemia;  
 KW human; chronic myelogenous leukemia; CML; follicular lymphoma;  
 KW B-cell acute lymphocytic leukemia; breast cancer; colon carcinoma;  
 KW neuroblastoma; lung cancer; genetic drift; mutation; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO9323057-A1.  
 XX  
 PD 25-NOV-1993.  
 XX  
 PF 13-MAY-1993; 93WO-US0004573.  
 XX  
 PR 14-MAY-1992; 92US-00882822.  
 PR 14-MAY-1992; 92US-00882885.  
 PR 26-AUG-1992; 92US-00936110.  
 PR 26-AUG-1992; 92US-00936421.  
 PR 26-AUG-1992; 92US-00936422.  
 PR 26-AUG-1992; 92US-00936531.  
 PR 26-AUG-1992; 92US-00936532.  
 PR 07-DEC-1992; 92US-00987131.  
 PR 19-JAN-1993; 93US-00006122.  
 PR 19-JAN-1993; 93US-00008910.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Thompson JD, Draper KG;  
 XX  
 DR WPI; 1993-386203/48.  
 XX

```
PT New enzymatic RNA molecules (ribozymes) - which cleave mRNA associated
PT with tumours or mRNA expressed from gene encoding multiple drug
PT resistance.
XX
PS Claim 3; Fig 2; 69pp; English.
XX
CC The sequences given in AAQ51816-24 represent areas of the multiple drug
CC resistance (mdr-1) mRNA which are accessible to the ribozyme of the
CC invention. The mdr-1 gene encodes a 170 kD integral membrane protein
CC which confers resistance to certain chemotherapeutic agents, such as
CC colchicine, doxorubicin, actinomycin D and vinblastine. The gene is
CC normally expressed in cells of the colon, small intestine, kidney, liver
CC and adrenal gland. High levels of MDR1 transcript have been found in
CC adenocarcinomas that are intrinsically resistant to a broad range of
CC chemotherapeutic agents, such as those derived from adrenal, kidney,
CC liver and bowel. The ribozymes of the invention may be used to inhibit
CC the development or expression of a transformed phenotype in man and other
CC animals by modulating expression of a gene that contributes to, or
CC inhibits the expression of chronic myelogenous leukemia (CML),
CC promyelocytic leukemia, follicular lymphoma, B-cell acute lymphocytic
CC leukemia, breast cancer, colon carcinoma, neuroblastoma, lung cancer, and
CC other neoplastic conditions. Cleavage of target mRNAs expressed in pre-
CC neoplastic and transformed cells elicits inhibition of the transformed
CC state. mdr-1 specific ribozymes remove the mechanism of drug resistance
CC used by transformed cells and thus enhances drug therapies for tumours.
CC The ribozymes may also be used to study genetic drift and mutations
CC within cells. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 18 BP; 12 A; 0 C; 5 G; 0 T; 1 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 2.3e+02;
Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
QY 1656 AAAAATAAGAGGAAAAA 1672
DB 1 AAAGAUAAGAGGAAAAA 17
||||:|||||
RESULT 331
AAQ73611/c
ID AAQ73611 standard; cDNA; 18 BP.
XX
AC AAQ73611;
XX
XX 25-MAR-2003 (revised)
DT 01-JUN-1995 (first entry)
XX
DE Dactylis glomerata protein allergen cDNA PCR primer DGI-8.
XX
KW Dactylis glomerata protein allergen; Dac gI; ryegrass pollen allergen;
KW Lol pI; Poa pI; Phl pI; DGI-8 PCR primer; ss.
XX
OS Synthetic.
XX
PN WO9421675-A2.
XX
PD 29-SEP-1994.
XX
PF 09-MAR-1994; 94WO-US002537.
XX
PR 12-MAR-1993; 93US-00031001.
XX
PA (IMMU-) IMMULOGIC PHARM CORP.
XX
XX Griffith IJ, Kuo M, Lugman M, Powers S;
XX WPI; 1994-316937/39.
XX
XX Isolated peptide(s) of Lol or p I, major protein allergen of species
PT Lolium perenne. - useful for diagnosis and treatment of sensitivity to
PT rye-grass pollen allergen.
XX
```

```
PS Example 5; Page 43; 125pp; English.
XX
CC AAQ73611 and AAQ73602 are a pair of primers used in the PCR generation
CC and isolation of AAQ73597, which encodes Dac gI (AAR60704) a major
CC protein allergen of Dactylis glomerata. Internal peptides (AAR60710-
CC R60757) isolated from a ryegrass major protein antigen (AAR60703) can be
CC used in the treatment and diagnosis of sensitivity to ryegrass pollen
CC protein (Lol pI), or pollen proteins that are immunologically related to
CC Lol pI e.g. Dac gI, Phl pI and Poa pI. (Updated on 25-MAR-2003 to correct
CC PN field.)
XX
SQ Sequence 18 BP; 3 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 927 GAGGTGGAAGGTCACCT 943
DB 17 GACGTGGAAGGTCACCT 1
|||||
RESULT 332
AAQ84677
ID AAQ84677 standard; DNA; 18 BP.
XX
AC AAQ84677;
XX
XX 25-MAR-2003 (revised)
DT 02-OCT-1995 (first entry)
XX
DE PCR primer for HSV-2 UL26 gene.
XX
KW Herpes simplex virus; HSV-2 protease; amplification; ss.
XX
OS Synthetic.
XX
PN WO9506055-A1.
XX
PD 02-MAR-1995.
XX
PF 19-AUG-1994; 94WO-US009303.
XX
PR 20-AUG-1993; 93US-00110522.
PR 23-JUN-1994; 94US-00264537.
XX
PA (SMIK ) SMITHKLINE BEECHAM CORP.
XX
PI Dilella AG, Debouck CM;
XX
DR WPI; 1995-106803/14.
XX
PT New herpes simplex virus (HSV)-2 protease and capsid protein - used to
PT develop prods. for use in the diagnosis and treatment of HSV-2
PT infections.
XX
PS Example 5; Page 23; 51pp; English.
XX
CC The sequence is that of a primer used to isolate the herpes simplex virus
CC type 2 gene UL26, encoding the HSV-2 protease. The gene can be used in
CC the diagnosis and treatment of HSV-2 infections. See also AAQ84671-8.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 18 BP; 12 A; 1 C; 5 G; 0 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1652 AAAGAAATATAGAGAGA 1668
DB 1 AAAGAAGAAGAGAGAGA 17
|||||
```

```

RESULT 333
AAT94951/c
ID AAT94951 standard; DNA; 18 BP.
XX
XX
AC AAT94951;
XX
XX
DT 27-FEB-1998 (first entry)
XX
XX
DE PCR primer RB 8.
XX
XX
KW Primer: amplification; PCR; human immunodeficiency virus; HIV;
KW separation; ss.
XX
XX
OS Synthetic.
OS Human immunodeficiency virus 1.
XX
XX
PN WO9730062-A1.
XX
XX
PD 21-AUG-1997.
XX
XX
PF 14-FEB-1997; 97WO-NL000063.
XX
XX
PR 14-FEB-1996; 96EP-00200354.
XX
XX
PA (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.
XX
XX
PI Goudsmit J, Sol CJA, Beld MGHM, Boom WR;
XX
XX
DR WPI; 1997-424964/39.
XX
XX
PT Separation of single stranded and double stranded nucleic acids - useful
PT for nucleic acid separation from, e.g. urine, faeces, sperm, cell
PT cultures, soil or water etc.
XX
XX
PS Disclosure; Page 13; 35pp; English.
XX
XX
CC The primers AAT94949-51 are used to amplify a 600 bp fragment of the
CC human immunodeficiency virus type 1 (HIV-1) in a novel method for
CC separating single stranded (ss) nucleic acid (NA) material from double
CC stranded (ds) NA material comprising contacting a mixture of both with a
CC liquid comprising a chaotropic agent and a NA binding solid phase, where
CC the liquid has a composition such that ds NA binds to the solid phase and
CC a ss NA does not, and separating the solid phase from the liquid
XX
XX
SQ Sequence 18 BP; 8 A; 3 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 388 TCATTTCGGCATTCTGT 404
Db 18 TCATTTCGGCATTCTGT 2

RESULT 334
AAV30615/c
ID AAV30615 standard; DNA; 18 BP.
XX
XX
AC AAV30615;
XX
XX
DT 13-AUG-1998 (first entry)
XX
XX
DE Telomerase reverse transcriptase PCR primer TCPI.17.
XX
XX
KW Human; telomerase reverse transcriptase; hTERT; TERT; diagnosis; prognosis;
KW cell proliferation; cancer; ageing; ribonucleoprotein; PCR primer; ss.
XX
XX
OS Synthetic.
OS Homo sapiens.
XX
XX
PN GB2317891-A.

XX
XX
PD 08-APR-1998.
XX
XX
PF 01-OCT-1997; 97GB-00020890.
XX
XX
PR 01-OCT-1996; 96US-00724643.
PR 18-APR-1997; 97US-00844419.
PR 25-APR-1997; 97US-00846017.
PR 06-MAY-1997; 97US-00851843.
PR 09-MAY-1997; 97US-00854050.
PR 14-AUG-1997; 97US-00911312.
PR 14-AUG-1997; 97US-00912951.
PR 14-AUG-1997; 97US-00915503.
XX
XX
PA (GERO-) GERON CORP.
PA (UYTE-) UNIV TECHNOLOGY CORP.
XX
XX
PI Cech TR, Lingner J, Nakamura T, Chapman KB, Morin GB, Harley CB;
PI Andrews WH;
XX
XX
DR WPI; 1998-171633/16.
XX
XX
PT Pure and recombinant human Telomerase Reverse Transcriptase and its
PT variants - are useful in the diagnosis, prognosis and treatment of cell
PT proliferation conditions especially cancer and ageing.
XX
XX
PS Disclosure; Page 40; 387pp; English.
XX
XX
CC The present sequence represents a PCR primer from the present invention
CC which describes human telomerase reverse transcriptase (hTERT). The
CC present invention also describes the following methods: (A) determining
CC whether a test compound is a modulator of hTERT, by detecting the change
CC in hTERT recombinant protein or polynucleotide, on administration of the
CC compound; (B) preparation of recombinant telomerase by contacting a
CC protein preparation of hTERT with a telomerase RNA component; (C)
CC detection of the hTERT RNA or protein in a sample by binding a relevant
CC probe to the sample and detecting the complex formed or in the case of
CC RNA detection, amplifying the product and correlating the presence of
CC complex or amplification product with presence of hTERT in the sample; and
CC (D) increasing the proliferation of a vertebrate cell by increasing hTERT
CC expression; and (E) the use of an agent that causes an increase in cell
CC vertebrate cell proliferation to create a medicament that inhibits
CC ageing. A protein preparation of hTERT and the polynucleotide encoding
CC hTERT can be used in the manufacture of medicaments for inhibiting the
CC effect of ageing or cancer. Inhibitors of telomerase activity can be used
CC to treat conditions that are associated with high telomerase activity. A
CC protein preparation of hTERT can also be used in the new methods
XX
XX
SQ Sequence 18 BP; 2 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1346 CCTGCCACACACGTGA 1362
Db 18 CCTGCCACACACGTGA 2

RESULT 335
AAV49735/c
ID AAV49735 standard; DNA; 18 BP.
XX
XX
AC AAV49735;
XX
XX
DT 23-OCT-1998 (first entry)
XX
XX
DE Plasmid pGHi oligonucleotide #2.
XX
XX
KW Filamentous fungi; fusion polypeptide; secretion; hormone; enzyme;
KW growth factor; cytokine; structural; plasma; construct; expression;
KW primer; ss.
XX
XX

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```

OS Synthetic.
PN WO9831821-A2.
XX
XX
XX
PD 23-JUL-1998.
XX
XX 07-JAN-1998; 98WO-US000474.
XX
XX 17-JAN-1997; 97US-00785668.
XX
XX (GEMV ) GENECOR INT INC.
PA
XX
XX Ward M, Power SD;
PI
XX WPI; 1998-414117/35.
XX
XX New fusion nucleic acid expressing fusion of polypeptide with fungal
PT signal peptide - useful for, e.g. providing high level expression and
PT secretion of, e.g. hirudin-type anti-coagulant(s).
XX
XX Example 4; Page 38; 64pp; English.
XX
XX AAV49716-V49737 are oligonucleotide primers used in a method to construct
CC novel fusion polypeptides which when expressed in a filamentous fungi
CC result in the expression of fusion polypeptides. The fusion polypeptides
CC are composed of a first nucleic acid sequence which encodes a signal
CC polypeptide functional as a secretory sequence in a first filamentous
CC fungi. A second nucleic acid encodes a secreted polypeptide of functional
CC portion thereof which is normally secreted from the same filamentous
CC fungi or a second filamentous fungi. A third nucleic acid encodes a
CC cleavable linker while a fourth comprises at least two nucleic acids
CC encoding desired polypeptides. Such constructs can be used to produce
CC e.g. hormones, enzymes, growth factors, cytokines, structural or plasma
CC proteins e.g. the anti-coagulants hirudin and its analogues. Such
CC constructs provide higher levels of expression and secretion than known
XX constructs
XX
XX Sequence 18 BP; 4 A; 7 C; 5 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1123 TCGCGGCCGACTGCTAG 1139
Db ||| ||||| |||||
17 TCGTGGCCGAGTGTAG 1
RESULT 336
AAV81059/c
ID AAV81059 standard; DNA; 18 BP.
XX
XX AAV81059;
AC
XX
XX 03-MAR-1999 (first entry)
DT
XX De-immunised 708 Vh constructing flanking primer DIVH8.
XX
XX Non-immunogenic; epitope; T-cell; immunogenicity; immune system; SK;
KW immunoglobulin; therapeutic; streptokinase; de-immunised; 708; primer;
KW ss.
XX
XX Synthetic.
OS
XX
XX WO9852976-A1.
PN
XX
XX 26-NOV-1998.
PD
XX
XX 21-MAY-1998; 98WO-GB001473.
XX
XX 21-MAY-1997; 97GB-00010480.
XX
XX 31-JUL-1997; 97GB-00016197.
XX
XX 28-NOV-1997; 97GB-00025270.
XX
PR 02-DEC-1997; 97US-0067235P.
PR 14-APR-1998; 98GB-00007751.
XX
XX (BIOV-) BIOVATION LTD.
PA
XX Carr FU;
PI
XX WPI; 1999-045301/04.
XX
XX Reducing immunogenicity of proteins - by modifying the amino acid
PT sequence of the protein to eliminate potential epitopes for T-cells of a
PT given species.
XX
XX Example 3; Fig 16; 77pp; English.
XX
XX The invention relates to a method for the production of non-immunogenic
CC proteins. The method comprises determining at least part of the amino
CC acid sequence of the protein; (b) identifying in the amino acid sequence
CC one or more potential epitopes for T-cells (T-cell epitopes) of the given
CC species; and (c) modifying the amino acid sequence to eliminate at least
CC one of the T-cell epitopes identified in step (b) thereby to eliminate or
CC reduce the immunogenicity of the protein when exposed to the immune
CC system of the given species. A method of analysing a pre-existing protein
CC to predict the basis for immunogenic responses is also provided. The
CC methods can be used particularly for reducing the immunogenicity of
CC immunoglobulins or therapeutic proteins, e.g. Streptokinase (SK). The
CC products can be used for diagnosis and therapy. Sequences AAV81047-68
CC represent oligonucleotides used for the construction of de-immunised 708
CC Vh and Vh
XX
XX Sequence 18 BP; 7 A; 3 C; 6 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 702 CTGGTCACGTGTCTAC 718
Db ||| ||||| |||||
18 CTGGTCACGTGTCTCTTC 2
RESULT 337
AAZ71563
ID AAZ71563 standard; DNA; 18 BP.
XX
XX AAZ71563;
AC
XX
XX 10-SEP-2001 (first entry)
DT
XX Human biallelic marker upstream amplification primer SEQ ID NO:5919.
XX
XX Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.
XX
XX Homo sapiens.
OS
XX WO9954500-A2.
PN
XX
XX 28-OCT-1999.
PD
XX
XX 21-APR-1999; 99WO-IB0000822.
XX
XX 21-APR-1998; 98US-0082614P.
XX
XX 23-NOV-1998; 98US-0109732P.
XX
XX (GEST ) GENSET.
PA
XX Cohen D, Blumenfeld M, Chumakov I;
PI
XX WPI; 2000-013267/01.
XX

```

XX Novel biallelic markers used to construct a high density disequilibrium  
PT map of the human genome.  
XX Claim 8; Page 1493; 2745pp; English.  
XX  
CC AAZ65654 to AAZ69578 represent human biallelic markers from the present  
CC invention, which contain a polymorphic base at position 24 of their  
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
CC primers for the biallelic markers. The biallelic markers of the invention  
CC have a variety of uses; they can be used for high density mapping of the  
CC human genome, and in complex association studies and haplotyping studies  
CC which are useful in determining the genetic basis for disease states.  
CC Compositions and methods of the invention can also be useful for the  
CC identification of the targets for the development of pharmaceutical  
CC agents and diagnostic methods, as well as the characterisation of the  
CC differential efficacious responses to and side effects from  
CC pharmaceutical agents acting on a disease as well as other treatment.  
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
CC 3367, are not actually given a sequence in the Sequence Listing from the  
CC present invention  
XX  
SQ Sequence 18 BP; 9 A; 2 C; 6 G; 1 T; 0 U; 0 Other;  
Query Match 0.7%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 177 CTCTTGGCCTTTCTAT 193  
DB 1 CTCTTGGCCTTTCTCT 17  
RESULT 338  
AAZ73867  
ID AAZ73867 standard; DNA; 18 BP.  
XX  
AC AAZ73867;  
XX  
DT 10-SEP-2001 (first entry)  
XX  
DE Human biallelic marker downstream amplification primer SEQ ID NO:8223.  
XX  
KW Human genome; biallelic marker; high density disequilibrium map;  
KW genomic map; haplotype; phenotype; polymorphic base; Genotyping;  
KW haplotyping; hybridisation; identification; characterisation;  
KW amplification; single nucleotide polymorphism; SNP; PCR primer;  
KW diagnosis; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO9954500-A2.  
XX  
PD 28-OCT-1999.  
XX  
PF 21-APR-1999; 99WO-IB000822.  
XX  
PR 21-APR-1998; 98US-0082614P.  
PR 23-NOV-1998; 98US-0109732P.  
XX  
PA (GENT ) GENSET.  
XX  
PI Cohen D, Blumenfeld M, Chumakov I;  
XX  
DR WPI; 2000-013267/01.  
XX  
PT Novel biallelic markers used to construct a high density disequilibrium  
PT map of the human genome.  
XX  
XX Claim 8; Page 1984; 2745pp; English.  
PS  
CC AAZ65654 to AAZ69578 represent human biallelic markers from the present  
CC invention, which contain a polymorphic base at position 24 of their  
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
CC primers for the biallelic markers. The biallelic markers of the invention  
CC have a variety of uses; they can be used for high density mapping of the  
CC human genome, and in complex association studies and haplotyping studies  
CC which are useful in determining the genetic basis for disease states.  
CC Compositions and methods of the invention can also be useful for the  
CC identification of the targets for the development of pharmaceutical  
CC agents and diagnostic methods, as well as the characterisation of the  
CC differential efficacious responses to and side effects from  
CC pharmaceutical agents acting on a disease as well as other treatment.  
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
CC 3367, are not actually given a sequence in the Sequence Listing from the  
CC present invention  
XX  
SQ Sequence 18 BP; 0 A; 8 C; 1 G; 9 T; 0 U; 0 Other;  
Query Match 0.7%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 177 CTCTTGGCCTTTCTAT 193  
DB 1 CTCTTGGCCTTTCTCT 17  
RESULT 339  
AAZ26971  
ID AAZ26971 standard; DNA; 18 BP.  
XX  
AC AAZ26971;  
XX  
DT 04-AUG-2000 (first entry)  
XX  
DE Bacillus thuringiensis cryET70 PCR primer AM43.  
XX  
KW Insecticide; delta-endotoxin; insect-resistant transgenic plant;  
KW crystal protein; lepidopteran pest; coleopteran pest;  
KW Western corn rootworm; Colorado potato beetle; Plutella xylostella;  
KW Trichoplusia ni; Bt toxin; PCR primer; ss.  
XX  
OS Bacillus thuringiensis.  
XX  
PN WO200026378-A1.  
XX  
PD 11-MAY-2000.  
XX  
PF 29-OCT-1999; 99WO-US025492.  
XX  
PR 02-NOV-1998; 98US-00184748.  
XX  
PA (MONS ) MONSANTO CO.  
XX  
PI Mettus AL, Baum JA;  
XX  
XX WPI; 2000-365625/31.  
XX  
PT Novel delta endotoxin polypeptide of bacillus thuringiensis useful for  
PT controlling lepidopteran or coleopteran insect population comprises at  
PT least ten contiguous amino acids of a specific sequence.  
XX  
PS Example 9; Page 117; 177pp; English.  
XX  
XX The present sequence is a PCR primer designated AM43 which is based on  
XX the sequence of the Bacillus thuringiensis gene cryET70 (AAZ26967), which  
XX encodes a delta-endotoxin crystal protein (AAZ94299). The primer was used  
XX to identify wild-type strains of Bacillus thuringiensis that have  
XX sequences related to cryET70. CryET70 is an insecticide that releases  
XX toxins when solubilised by insect mid-gut proteolytic enzymes. It can be  
XX used to control and kill lepidopteran insects, such as Plutella  
XX xylostella and Trichoplusia ni, or coleopteran insects, such as Western  
XX corn rootworm and Colorado potato beetle. The composition comprising  
XX CryET70 is eco-friendly as it is toxic to specific target insects but  
XX harmless to plants and other non-targeted organisms. The cryET70 gene may

CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification  
CC primers for the biallelic markers. The biallelic markers of the invention  
CC have a variety of uses; they can be used for high density mapping of the  
CC human genome, and in complex association studies and haplotyping studies  
CC which are useful in determining the genetic basis for disease states.  
CC Compositions and methods of the invention can also be useful for the  
CC identification of the targets for the development of pharmaceutical  
CC agents and diagnostic methods, as well as the characterisation of the  
CC differential efficacious responses to and side effects from  
CC pharmaceutical agents acting on a disease as well as other treatment.  
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and  
CC 3367, are not actually given a sequence in the Sequence Listing from the  
CC present invention  
XX  
SQ Sequence 18 BP; 9 A; 2 C; 6 G; 1 T; 0 U; 0 Other;  
Query Match 0.7%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1500 AACAGGGAGTGTTAAAC 1516  
DB 2 AACAGGGAGAGATAAAC 18  
RESULT 339  
AAZ26971  
ID AAZ26971 standard; DNA; 18 BP.  
XX  
AC AAZ26971;  
XX  
DT 04-AUG-2000 (first entry)  
XX  
DE Bacillus thuringiensis cryET70 PCR primer AM43.  
XX  
KW Insecticide; delta-endotoxin; insect-resistant transgenic plant;  
KW crystal protein; lepidopteran pest; coleopteran pest;  
KW Western corn rootworm; Colorado potato beetle; Plutella xylostella;  
KW Trichoplusia ni; Bt toxin; PCR primer; ss.  
XX  
OS Bacillus thuringiensis.  
XX  
PN WO200026378-A1.  
XX  
PD 11-MAY-2000.  
XX  
PF 29-OCT-1999; 99WO-US025492.  
XX  
PR 02-NOV-1998; 98US-00184748.  
XX  
PA (MONS ) MONSANTO CO.  
XX  
PI Mettus AL, Baum JA;  
XX  
XX WPI; 2000-365625/31.  
XX  
PT Novel delta endotoxin polypeptide of bacillus thuringiensis useful for  
PT controlling lepidopteran or coleopteran insect population comprises at  
PT least ten contiguous amino acids of a specific sequence.  
XX  
PS Example 9; Page 117; 177pp; English.  
XX  
XX The present sequence is a PCR primer designated AM43 which is based on  
XX the sequence of the Bacillus thuringiensis gene cryET70 (AAZ26967), which  
XX encodes a delta-endotoxin crystal protein (AAZ94299). The primer was used  
XX to identify wild-type strains of Bacillus thuringiensis that have  
XX sequences related to cryET70. CryET70 is an insecticide that releases  
XX toxins when solubilised by insect mid-gut proteolytic enzymes. It can be  
XX used to control and kill lepidopteran insects, such as Plutella  
XX xylostella and Trichoplusia ni, or coleopteran insects, such as Western  
XX corn rootworm and Colorado potato beetle. The composition comprising  
XX CryET70 is eco-friendly as it is toxic to specific target insects but  
XX harmless to plants and other non-targeted organisms. The cryET70 gene may

CC be expressed in Bacillus thuringiensis cells to produce an insecticide in  
CC the form of powder, pellet, spray etc or may be used to generate insect-  
CC resistant transgenic plants. Parts of the sequence may also be used as  
CC hybridisation probes to detect nucleic acids encoding delta-endotoxins. A  
CC probe (AA26969) specific for the N-terminal amino acid sequence of the  
CC protein was designed using codons typically found in B. thuringiensis  
CC toxin genes and was used to screen a genomic library composed of DNA  
CC sequences from B. thuringiensis strain EG4140. DNA from hybridised  
CC colonies was extracted and sequenced

XX SQ Sequence 18 BP; 4 A; 8 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1719 CATCACTTTACCCCTAG 1735  
Db 1 CATCACTTTCCCATAG 17  
|||||

RESULT 340  
AACT3473  
ID AAC73473 standard; DNA; 18 BP.

XX AC AAC73473;

XX DT 02-FEB-2001 (first entry)

XX DE Forward primer #101 used in multiplexing PCR/SBE assay.

XX KW Oligonucleotide array; genotyping; single base extension reaction; SBE;  
XX KW PCR primer; polymorphic locus; single nucleotide polymorphism; ss.

XX OS Unidentified.

XX PN WO200058516-A2.

XX PD 05-OCT-2000.

XX PF 27-MAR-2000; 2000WO-US008069.

XX PR 26-MAR-1999; 99US-0126473P.

XX PR 23-JUN-1999; 99US-0140359P.

XX PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.

XX PA (AFFY-) AFFYMETRIX INC.

XX PI Fan J, Hirschhorn JN, Huang X, Kaplan P, Lander ES, Lockhart DJ;  
XX PI Ryder T, Sklar P;

XX DR WPI; 2000-656171/63.

XX PT Universal array of oligonucleotides tags attached to a solid substrate  
XX PT along with locus-specific tagged oligonucleotides useful in genotyping  
XX PT using single base extension reactions.

XX PS Example 7; Page 58; 70pp; English.

XX CC The present invention relates to an oligonucleotide array comprising  
XX CC oligonucleotide tags fixed to a solid substrate. The oligonucleotide  
XX CC array is useful for genotyping a nucleic acid sample at one or more loci  
XX CC via single base extension (SBE) reactions. A pair of primers is used to  
XX CC amplify a polymorphic locus in a sample e.g. a single nucleotide  
XX CC polymorphism (SNP). The present sequence is one of the primers used in  
XX CC the method of the present invention to amplify a polymorphic sample. The  
XX CC amplified nucleic acid product is then used as a template in a SBE  
XX CC reaction with an extension primer. The SBE reaction products are used to  
XX CC form the oligonucleotide array

XX SQ Sequence 18 BP; 1 A; 5 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 761 CGCGGTCTGTGCGCTGG 777  
Db 1 CGTGGTCTGTTCCTGG 17  
|||||

RESULT 341  
AAF79630/c

ID AAF79630 standard; DNA; 18 BP.

XX AC AAF79630;

XX DT 29-MAY-2001 (first entry)

XX DE Human Akt-3 antisense oligonucleotide, SEQ ID NO: 38.

XX KW Human; Akt-3; protein kinase; cytostatic; antiinflammatory; infection;  
XX KW antisense therapy; inflammation; tumour; ss.

XX OS Homo sapiens.

XX PN US6187586-B1.

XX PD 13-FEB-2001.

XX PF 29-DEC-1999; 99US-00474922.

XX PR 29-DEC-1999; 99US-00474922.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Monia BP, Cowsett LM, Roth RA;

XX DR WPI; 2001-264979/27.

XX PT New antisense compounds targeting nucleic acids encoding human Akt-3  
XX PT useful for treating a disease or condition associated with Akt-3  
XX PT expression, or in preventing or delaying inflammation or tumor formation.

XX PS Claim 1; Col 39; 37pp; English.

XX CC The present sequence is one of a number of antisense compounds of up to  
XX CC 30 nucleobases in length targeted to a nucleic acid encoding human Akt-3.  
XX CC The antisense compounds are useful for inhibiting the expression of human  
XX CC Akt-3 in human cells or tissues. They are also useful for modulating the  
XX CC expression of Akt-3, and for treating a human or an animal suspected of  
XX CC having, or being prone to, a disease or condition associated with Akt-3  
XX CC reagents, in kits and in diagnostics, e.g. to elucidate the function of a  
XX CC particular gene or to distinguish between functions of various members of  
XX CC a biological pathway; and as a prophylactic, e.g. to prevent or delay  
XX CC infection, inflammation or tumour formation

XX SQ Sequence 18 BP; 1 A; 6 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1630 AGTCCAGAGGCAAGGGA 1646  
Db 18 ACTCCAGAGGMAAGGGA 2  
|||||

RESULT 342

AAD24800

ID AAD24800 standard; DNA; 18 BP.

XX AC AAD24800;

XX DT 12-MAR-2002 (first entry)



```
XX DE Bacillus thuringiensis cryET70 DNA amplifying PCR primer, AM43.
XX KW Coleopteran insect infestation; insecticidal; crystal protein; tIC851;
XX KW cryET70; cry22Aa; plant protection; cotton boll weevil; transgenic plant;
XX KW PCR primer; 88.
XX OS Bacillus thuringiensis.
XX PN WO200187940-A2.
XX PD 22-NOV-2001.
XX PF 30-APR-2001; 2001WO-US013879.
XX PR 15-MAY-2000; 2000US-0204367P.
XX PA (MONS ) MONSANTO TECHNOLOGY LLC.
XX PI Isaac BC, Krieger EK, Mettus Light A, Sivasupramaniam S;
XX PI Moshiri F;
XX DR WPI; 2002-055684/07.
XX PT Novel polypeptide and polynucleotide compositions toxic to Anthonomus
XX PT insects, useful in insecticidal formulations and for the development of
XX PT transgenic insect-resistant plants.
XX PS Example 1; Page 59; 133pp; English.
XX CC The present invention relates to novel genes encoding Coleopteran
XX CC inhibitory Bacillus thuringiensis insecticidal crystal proteins, tIC851,
XX CC cryET70 and cry22Aa. These proteins are insecticidally active and provide
XX CC plant protection from coleopteran insects such as cotton boll weevil
XX CC (Anthonomus grandis Bohemian). Compositions containing proteins of the
XX CC invention are useful for making transgenic plants resistant to
XX CC coleopteran insect infestation. The present DNA sequence is a PCR primer
XX CC which is used for amplifying B. thuringiensis cryET70 DNA
XX SQ Sequence 18 BP; 4 A; 8 C; 1 G; 5 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1719 CATCACTTTACCCCTAG 1735
DB 1 CATCACTTTCCCATAG 17
RESULT 343
ABK89490/C
ID ABK89490 standard; DNA; 18 BP.
XX AC ABK89490;
XX AC AC
XX DT 05-NOV-2002 (first entry)
XX DE PCR primer, #10, used to identify beta-2-adrenergic receptor SNPs.
XX KW PCR; primer; 88; functional polymorphism; single nucleotide polymorphism;
XX KW SNP; genetic diagnosis; genetic marker; allele; therapeutic; genotyping;
XX KW gene therapy; genetic linkage; human; beta-2-adrenergic receptor; ADRB2;
XX KW nocturnal asthma; obesity.
XX OS Homo sapiens.
XX OS WO200246459-A2.
XX PN 13-JUN-2002.
XX PD 06-DEC-2001; 2001WO-EP015427.
XX PF
XX PS
```

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PR 06-DEC-2000; 2000FR-00015838.
XX PA (GENO-) GENODYSSEE.
XX PI Bacary J;
XX DR WPI; 2002-527925/56.
XX PT Determining single nucleotide polymorphisms in nucleotide sequence of
XX PT preselected gene, comprises isolating fragment of preselected gene from
XX PT each individual of random population and identifying single nucleotide
XX PT polymorphism.
XX PS Example 4; Page 54; 64pp; English.
XX CC The invention discloses a method of determining a functional single
XX CC nucleotide polymorphism (SNP) in a gene. The method comprises
XX CC preselecting a candidate gene, providing a random sample population,
XX CC isolating from each individual, at least one fragment of nucleotide
XX CC sequence of the candidate gene, identifying at least one SNP in one of
XX CC the isolated fragments and, from the SNP(s) identified, identifying those
XX CC with functionality. The method is useful for determining at least one
XX CC functional SNP in a gene and for genetic diagnosis of a disease, or a
XX CC resistance to a disease, linked to the presence of a mutated nucleotide
XX CC sequence of the preselected candidate gene in an individual. The method
XX CC is also useful for generating a map of genetic markers, for preparing a
XX CC polynucleotide or polypeptide comprising the SNP which is useful for the
XX CC preparation of a medicament for treating an individual having a pathology
XX CC and/or disease correlated to the presence or absence of a mutated allele,
XX CC and for creating a databank of functional SNPs. The identification of
XX CC functional SNPs enables the identification of new therapeutic targets and
XX CC the development of therapeutic molecules such as antibodies, vectors of
XX CC gene therapy and active molecules determined from the structure of the
XX CC mutated proteins encoded by the mutated alleles of the SNP containing
XX CC genes. The method saves time, money and energy in the discovery of
XX CC potential targets and is more reliable for discovering
XX CC prognostic/diagnostic and therapeutic targets on the genome in comparison
XX CC to studies of associations or genetic linkages based on genotyping. The
XX CC studies sensitive or resistant to the disease and control persons. The
XX CC sequence presented is the antisense PCR primer, #10, which was used to
XX CC identify the R16G and Q27E beta-2-adrenergic receptor (ADRB2) SNPs to
XX CC validate the disclosed method of SNP identification. These ADRB2 SNPs are
XX CC associated with nocturnal asthma and obesity, respectively
XX SQ Sequence 18 BP; 7 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 225 TGGTATTTCGCAATG 241
DB 17 TCGTGTTCGCAATG 1
RESULT 344
ACF62970/C
ID ACF62970 standard; DNA; 18 BP.
XX AC ACF62970;
XX AC AC
XX DT 09-OCT-2003 (first entry)
XX DE Human p16 PCR primer SEQ ID NO:219.
XX KW Human; colon cancer; oestrogen receptor; myoglobin; p21; p27; p16; p53;
XX KW progesterone receptor; pcna; CEA; cdc2; c-erbB2; methylation; Ccp;
XX KW characterisation; classification; diagnosis; differentiation;
XX KW colon cell proliferative disorder; PCR primer; 88.
XX OS Homo sapiens.
XX OS Synthetic.
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PN WO2003014388-A2.
XX
XX
PD 20-FEB-2003.
XX
XX PF 09-AUG-2002; 2002WO-EF008939.
XX
XX PR 09-AUG-2001; 2001DE-01039283.
XX
XX PA (EPiG-) EPIGENOMICS AG.
XX
XX PI Distler J, Model F, Taubert H;
XX
XX DR WPI; 2003-256600/25.
XX
XX PT Determining methylation status of CpG dinucleotides using modified
XX PT genomic sequences, oligonucleotides and/or PNA-oligomers, useful in the
XX PT characterization, grading, staging and/or diagnosis of colon cancer.
XX
XX PS Claim 26; Page 160; 219pp; English.
XX
XX CC The present invention describes a method for determining the methylation
XX CC status of CpG dinucleotides within the genes for oestrogen receptor, p21,
XX CC p27, p16, progesterone receptor, myoglobin, pcna, cdc2, c-erbB2, p53
XX CC and/or CEA, which comprises contacting the target nucleic acid with a
XX CC reagent that distinguishes between methylated and non-methylated CpG
XX CC dinucleotides, and determining from the methylation status of the CpG
XX CC positions the presence of a colon cancer. A set of oligomers or peptide
XX CC nucleic acid (PNA)-oligomers can be used as probes for determining the
XX CC cytosine methylation state and/or single nucleotide polymorphisms (SNP)
XX CC of a corresponding genomic DNA by analysis of a chemically pretreated
XX CC genomic DNA. The pretreated genomic DNA is useful for the determination
XX CC of the methylation status of a corresponding genomic DNA and/or detection
XX CC of SNPs. The methods and pretreated genomic DNA are also useful for the
XX CC characterisation, classification, diagnosis and differentiation of colon
XX CC cell proliferative disorders. ACF62752 to ACF63278 represent sequences
XX CC used in the exemplification of the present invention
XX
XX SQ Sequence 18 BP; 1 A; 0 C; 9 G; 8 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1613 CATCGCTCACCACCAACC 1629
DB ||| ||||| ||||| |||||
17 CAACCCCTCACCACCAACC 1

RESULT 345
ACF62972
ID ACF62972 standard; DNA; 18 BP.
XX
XX AC ACF62972;
XX
XX DT 09-OCT-2003 (first entry)
XX
XX DE Human p16 PCR primer SEQ ID NO:221.
XX
XX KW Human; colon cancer; oestrogen receptor; myoglobin; p21; p27; p16; p53;
XX KW progesterone receptor; pcna; CEA; cdc2; c-erbB2; methylation; CpG;
XX KW characterisation; classification; diagnosis; differentiation;
XX KW colon cell proliferative disorder; PCR primer; ss.
XX
XX OS Homo sapiens.
XX OS Synthetic.
XX
XX PN WO2003014388-A2.
XX
XX PD 20-FEB-2003.
XX
XX PF 09-AUG-2002; 2002WO-EF008939.
XX
XX PR 09-AUG-2001; 2001DE-01039283.
XX
XX PA (EPiG-) EPIGENOMICS AG.
XX
XX PI Distler J, Model F, Taubert H;
XX
XX DR WPI; 2003-256600/25.
XX
XX CC The present invention describes a method for determining the methylation
XX CC status of CpG dinucleotides within the genes for oestrogen receptor, p21,
XX CC p27, p16, progesterone receptor, myoglobin, pcna, cdc2, c-erbB2, p53
XX CC and/or CEA, which comprises contacting the target nucleic acid with a
XX CC reagent that distinguishes between methylated and non-methylated CpG
XX CC dinucleotides, and determining from the methylation status of the CpG
XX CC positions the presence of a colon cancer. A set of oligomers or peptide
XX CC nucleic acid (PNA)-oligomers can be used as probes for determining the
XX CC cytosine methylation state and/or single nucleotide polymorphisms (SNP)
XX CC of a corresponding genomic DNA by analysis of a chemically pretreated
XX CC genomic DNA. The pretreated genomic DNA is useful for the determination
XX CC of the methylation status of a corresponding genomic DNA and/or detection
XX CC of SNPs. The methods and pretreated genomic DNA are also useful for the
XX CC characterisation, classification, diagnosis and differentiation of colon
XX CC cell proliferative disorders. ACF62752 to ACF63278 represent sequences
XX CC used in the exemplification of the present invention
XX
XX SQ Sequence 18 BP; 8 A; 9 C; 0 G; 1 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 2.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1613 CATCGCTCACCACCAACC 1629
DB ||| ||||| ||||| |||||
2 CAACCCCTCACCACCAACC 18

RESULT 346
ACF57207
ID ACF57207 standard; DNA; 18 BP.
XX
XX AC ACF57207;
XX
XX DT 16-OCT-2003 (first entry)
XX
XX DE Human LAMA3 forward PCR primer SEQ ID NO:7.
XX
XX KW Human; mouse; skin structure; skin; laminin 5 chain gene; LAMA3; LAMB3;
XX KW MMP-2; extracellular matrix component; matrix metalloproteinase; MMP-1;
XX KW MMP-3; MMP-9; TIMP-1; TIMP-2; TIMP-3; collagen; PCR primer; ss.
XX
XX OS Homo sapiens.
XX OS Synthetic.
XX
XX PN JP2002330792-A.
XX
XX PD 19-NOV-2002.
XX
XX PF 15-JAN-2002; 2002JP-00006797.
XX
XX PR 15-JAN-2001; 2001JP-00006952.
XX
XX PA (SHIS ) SHISEIDO CO LTD.
XX
XX DR WPI; 2003-407328/39.
XX
XX PT A method and a kit for determination of expression of mRNA or cDNA of a
XX PT protein participating in the maintenance of skin structure.
XX

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PS Claim 1; Page 2; 34pp; Japanese.

XX The present invention describes a method and a kit for determining the

CC expression of mRNA or cDNA of a protein participating in the maintenance

CC of skin structure. The method is quantitative, simple and accurate in the

CC determination of extracellular matrix components of laminin 5 chain genes

CC LAMA3, LAMB3 and LAMC2, matrix metalloproteinases MMP-1, MMP-2, MMP-3 and

CC MMP-9, VII collagen, type I collagen alpha 1 chain, type I collagen alpha

CC 2 chain, type III collagen alpha 1 chain, type IV collagen alpha 1 chain,

CC type IV collagen alpha 2 chain, TIMP-1, TIMP-2 and TIMP-3. ACF57201 to

CC ACF57290 represent PCR primers and probes used in the method of the

CC invention

XX Sequence 18 BP; 1 A; 3 C; 8 G; 6 T; 0 U; 0 Other;

SQ Query Match 0.7%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 2.3e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 223 GGTGGTATTTGGCAATG 239

DB 2 GGTGGTGTGGCCATG 18

RESULT 347

ADH69044/c

ID ADH69044 standard; DNA; 18 BP.

AC ADH69044;

XX 25-MAR-2004 (first entry)

DE Hepatitis C virus genotype 2b oligonucleotide HCV2bL-2.

XX ss; primer; antiinflammatory; hepatotropic; virucide; vaccine;

KW hepatitis C virus; HCV; NS3; NS4; diagnosis; drug therapy.

XX Hepatitis C virus.

XX WO200307729-A2.

XX 25-SEP-2003.

XX 11-MAR-2003; 2003WO-US007585.

XX 11-MAR-2002; 2002US-0363603P.

XX (HOLL/) HOLLAND-STALEY C.

XX Holland-Staley C;

XX WPI; 2003-767436/72.

XX New nucleic acid sequences from Hepatitis C virus (HCV) genome

PT corresponding to HCV1a, HCV2b, HCV3a, HCV3b and HCV4a subtypes,

PT useful as vaccine for the preventing and/or treating HCV infection.

XX Claim 1; SEQ ID NO 31; 101pp; English.

XX The invention relates to nucleic acids derived from hepatitis C virus

CC (HCV) sequences (S1) where oligonucleotide derived from these sequences

CC are able to anneal to the NS3 or NS4 gene of HCV, or a fragment. The

CC nucleic acids may comprise at least 80 % identity to (S1) or at least 8

CC nucleotides from it. The nucleic acids or oligonucleotides derived from

CC them can be used to diagnose HCV infections. The nucleic acids are useful

CC for detecting HCV infection, including early stage detection, for

CC identifying types of HCV infection; for detecting variant strains of HCV,

CC mutation in the HCV nucleic acid responsible for resistance or

CC sensitivity to a therapy, or new mutations in the HCV genome correlated

CC with resistance or sensitivity to a drug therapy, for determining whether

CC treatment with an agent should or should not be continued, for

CC identifying the interaction between HCV and other viruses and/or

CC diseases, for generating a nucleic acid which may be patient specific,

CC

CC for developing new drugs, and as vaccine for the prevention and/or

CC treatment of HCV. This sequence represents a sequence used in the method

CC of the invention.

XX Sequence 18 BP; 3 A; 7 C; 2 G; 6 T; 0 U; 0 Other;

SQ Query Match 0.7%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 2.3e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1930 TGAATTGGAGAAATGCG 1946

DB 18 TGAGATGGAGAAATGCG 2

RESULT 348

ABV75973/c

ID ABV75973 standard; DNA; 18 BP.

XX ABV75973;

XX 11-FEB-2003 (first entry)

XX Mouse insulin gene PCR primer.

DE Stem cell; differentiation; beta-cell; insulin; diabetes; hyperglycaemia;

KW glucose intolerance; antidiabetic; hypoglycaemic; gene therapy; mouse;

KW PCR; primer; ss.

XX Mus musculus.

XX WO200286107-A2.

XX 31-OCT-2002.

XX 19-APR-2002; 2002WO-EP004362.

XX 19-APR-2001; 2001US-0284531P.

XX (DEVE-) DEVELOPENTWICKLUNGSBIOLOGISCHE FORSCH.

PA (PFLA-) INST PFLANZENGENETIK & KULTURPFLANZENFOR.

XX Wobus AM, St-Onge L, Blyszczuk P, Hoffmann U;

XX WPI; 2003-075629/07.

XX Differentiating stem cells into insulin-producing cells useful for

PT treating pancreatic diseases, by culturing stem cells in suitable medium

PT and activating gene involved in beta-cell differentiation.

XX Example 4; Page 61; 62pp; English.

XX The present sequence is one of a primer pair (see also ABV75974) used in

CC the RT-PCR amplification of insulin cDNA in a semi-quantitative analysis

CC of expression levels of pancreas-specific genes in mouse embryonic stem

CC (ES) cells. In this example of the invention, mouse ES cells were

CC electroporated with murine Pdx1 (see ABV75967) or Pax4 (see ABV75968)

CC genes. The ES cells were then cultivated as embryoid bodies, and

CC differentiated into insulin-producing cells. RT-PCR analysis showed that

CC insulin mRNA levels were higher in Pdx1+ and Pax4+ ES cells than in wild-

CC type ES cells indicating that differentiation is more efficient when a

CC pancreatic developmental control gene is activated. The invention

CC provides a method of differentiating stem cells into insulin-producing

CC cells by activation of a gene involved in beta-cell differentiation, e.g.

CC Pax4 or Pdx1. The insulin-producing cells are useful for the treatment of

CC pancreatic diseases, metabolic syndrome and metabolic disorders with

CC impaired glucose levels such as diabetes, hyperglycaemia and impaired

CC glucose tolerance (claimed)

XX Sequence 18 BP; 4 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

SQ Query Match 0.7%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 2.3e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 861 CTGGACACTAAGGCGAG 877  
 Db 17 CTGGTCACTAAGGCGTG 1

RESULT 349  
 ADH70522/C  
 ID ADH70522 standard; DNA; 18 BP.  
 XX  
 AC ADH70522;  
 XX  
 DT 25-MAR-2004 (first entry)  
 XX  
 DE Human Vbeta gene repeat sequence #312.  
 XX  
 KW human; T-cell associated disease; Vbeta; autoimmune disease;  
 KW degenerative nervous system disease; graft versus host disease;  
 KW hypersensitivity disease; infectious disease; neoplastic disease;  
 KW Addison's disease; atrophic gastritis;  
 KW degenerative nervous system disease; multiple sclerosis;  
 KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;  
 KW allergy; type II hypersensitivity; Goodpasture's syndrome;  
 KW type IV hypersensitivity; leprosy; infectious disease; viral infection;  
 KW HIV; fungal infection; Candida; parasitic infection; schistosomiasis;  
 KW filaria; bacterial infection; Mycobacterium; neoplastic disease;  
 KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;  
 KW breast cancer; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 PN US2002150891-A1.  
 XX  
 PD 17-OCT-2002.  
 XX  
 PF 05-MAR-1999; 99US-00263959.  
 XX  
 PR 19-SEP-1994; 94US-00309335.  
 PR 19-SEP-1995; 95US-00531241.  
 XX  
 PA (HOOD/) HOOD L E.  
 PA (ROWE/) ROWEN L.  
 PI Hood LE, Rowen L;  
 XX  
 DR WPI; 2004-059052/06.  
 XX  
 PT Kit for diagnosing and treating T-cell associated diseases e.g.  
 PT autoimmune, degenerative nervous system and infectious disease, comprises  
 PT nucleic acid primers specifically priming and allowing amplification of a  
 PT Vbeta gene.  
 XX  
 PS Disclosure; SEQ ID NO 716; 164pp; English.  
 XX  
 CC The invention relates to a kit for diagnosing and treating T-cell  
 CC associated diseases which comprises a panel of nucleic acid primers  
 CC specifically priming and allowing amplification of each Vbeta gene,  
 CC VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant  
 CC rejection and diagnosing and treating T-cell associated diseases,  
 CC including autoimmune diseases, degenerative nervous system diseases,  
 CC graft versus host disease, hypersensitivity disease, infectious diseases  
 CC and neoplastic diseases. Autoimmune diseases include Addison's disease,  
 CC atrophic gastritis. Degenerative nervous system diseases include multiple  
 CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type  
 CC I hypersensitivities such as contact with allergens that lead to  
 CC allergies, Type II hypersensitivities such as those present in  
 CC Goodpasture's syndrome and Type IV hypersensitivities such as those  
 CC caused by viruses such as HIV, fungal infections include viral infections  
 CC manifested in leprosy. Infectious diseases include viral infections  
 CC caused by the yeast genus Candida, parasitic infections such as those caused by  
 CC schistosomes, filaria and bacterial infections such as those caused by  
 CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases

CC such as leukaemias, lymphomas and cancers such as cancer of the brain,  
 CC breast. The present sequence represents a Vbeta gene repeat sequence.  
 XX  
 SQ Sequence 18 BP; 0 A; 2 C; 0 G; 16 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 13.8; DB 1; Length 18;  
 Best Local Similarity 88.2%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1652 AAAGAAAATAGAGCA 1668  
 Db 17 AAAGAAAATAGAGCA 1

RESULT 350  
 ADM79168/C  
 ID ADM79168 standard; DNA; 18 BP.  
 XX  
 AC ADM79168;  
 XX  
 DT 15-JUL-2004 (first entry)  
 XX  
 DE Human delta tryptase PCR primer.  
 XX  
 KW delta tryptase; enzyme; antiinflammatory; antiasthmatic; antiallergic;  
 KW ophthalmological; antiarthritic; dermatological; asthma;  
 KW allergic rhinitis; urticaria; angioedema; eczematous; aphylaxis;  
 KW dermatitis; atopic dermatitis; hyperproliferative skin disease;  
 KW peptic ulcer; inflammatory bowel disorder; ocular conjunctivitis;  
 KW vernal conjunctivitis; rheumatoid arthritis; inflammatory skin condition;  
 KW human; PCR; primer; ss.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 PN WO2004033494-A1.  
 XX  
 PD 22-APR-2004.  
 XX  
 PF 28-FEB-2003; 2003WO-AU000249.  
 XX  
 PR 08-OCT-2002; 2002AU-00951912.  
 XX  
 PA (UNIX ) UNISEARCH LTD.  
 XX  
 PI Hunt JE, Wang H, Mcneil HP, Husain A;  
 XX  
 DR WPI; 2004-340891/31.  
 XX  
 PT New purified expressed delta tryptase polypeptide, its fragment or  
 PT analog, useful for treating asthma, allergic rhinitis, urticaria,  
 PT angioedema, eczematous anaphylaxis, hyperproliferative skin disease,  
 PT peptic ulcers.  
 XX  
 PS Example 5; Page 25; 51pp; English.  
 XX  
 CC The present invention describes a purified expressed delta tryptase  
 CC polypeptide, its fragment or analogue. Also described: (1) a recombinant  
 CC host cell expressing the polypeptide; (2) an antibody that selectively  
 CC binds to the polypeptide; (3) identifying a compound that interacts, or  
 CC binds with the polypeptide or its fragment or analogue; (4) screening for  
 CC a compound that modulates the activity of the polypeptide, its fragment  
 CC or analogue; (5) diagnosing a disease state, or predisposition to a  
 CC disease state in a subject; (6) identifying an agent that is an inhibitor  
 CC of mast cell-mediated inflammation; (7) identifying an agent for treating  
 CC or preventing a mast cell-mediated inflammatory disease state in a  
 CC subject; (8) treating or preventing a disease state in a subject; (9)  
 CC inhibiting mast cell-mediated inflammation in a subject; and (10) a kit  
 CC comprising at least one antibody, or polypeptide, its fragment or  
 CC analogue as described above. The delta tryptase polypeptide has  
 CC antiinflammatory, antiasthmatic, antiallergic, ophthalmological,  
 CC antiarthritic and dermatological activities. Delta tryptase polypeptides  
 CC are useful for treating asthma, allergic rhinitis, urticaria, angioedema,

CC eczematous anaphylaxis, dermatitis such as atopic dermatitis,  
 CC hyperproliferative skin disease, peptic ulcers, inflammatory bowel  
 CC disorder, ocular and vernal conjunctivitis, rheumatoid arthritis, and  
 CC inflammatory skin conditions. The kit is useful for identifying a  
 CC compound that interacts with or binds to the polypeptide, screening for a  
 CC compound that modulates the activity of the polypeptide, diagnosing a  
 CC disease state, or predisposition to a disease state, in a subject. The  
 CC present sequence represents a PCR primer for delta trypcase, which is  
 CC used in an example from the present invention.

XX  
 SQ Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1943 TGCCTGGTGAATGGCAC 1959

Db 18 TGCAGGTGAATGGCAC 2

RESULT 351

ADO26678/c

ID ADO26678 standard; DNA; 18 BP.

XX ADO26678;

XX 12-AUG-2004 (first entry)

XX Synthetic leader sequence encoding DNA SEQ ID NO:71.

XX phenotype; phenotypic preference; phenotype modulation; leader; ds.

XX Synthetic.

XX WO2004042059-A1.

XX 21-MAY-2004.

XX 10-NOV-2003; 2003WO-AU001487.

XX 08-NOV-2002; 2002US-0425163P.

XX (UYQU ) UNIV QUEENSLAND.

XX Frazer IH;

XX WPI; 2004-411519/38.

XX P-PSDB; ADO26679.

XX Constructing synthetic polynucleotide for modulating the quality of a  
 PT selected phenotype displayed by an organism comprises replacing a first  
 PT codon with a synonymous codon to construct the synthetic polynucleotide.

PS Example 1; SEQ ID NO 71; 86pp; English.

XX The present invention describes a method for constructing a synthetic  
 CC polynucleotide from which a polypeptide is producible to confer a  
 CC selected phenotype to an organism of interest or part in a different  
 CC quality than that conferred by a parent polynucleotide that encodes the  
 CC same polypeptide. The method comprises: (a) selecting a first codon of  
 CC the parent polynucleotide for replacement with a synonymous codon, where  
 CC the synonymous codon is selected on the basis that it exhibits a  
 CC different phenotypic preference than the first codon in a comparison of  
 CC phenotypic preferences in test organisms or parts, where the test  
 CC organism are selected from organisms of the same species as the organism  
 CC of interest and organisms that are related to the organisms of interest;  
 CC and (b) replacing the first codon with the synonymous codon to construct  
 CC the synthetic polynucleotide. Also described: (1) a method for  
 CC determining the phenotypic preference of a first codon in an organism of  
 CC interest or its parts; (2) a synthetic polynucleotide constructed from  
 CC the method above; (3) an organism or interest or part containing a  
 CC synthetic polynucleotide constructed from the method above; (4) an

CC organism or interest or part containing a synthetic construct that  
 CC comprises a regulatory polynucleotide operably linked to a tandem repeat  
 CC of a first codon fused in frame with a reporter polynucleotide that  
 CC encodes a reporter protein, which produces, or is predicted to produce a  
 CC selected phenotype or a phenotype of the same class as the selected  
 CC phenotype in the organism or part; (5) a method of modulating the quality  
 CC of a selected phenotype that is displayed by an organism of interest or  
 CC part and that results from the expression of a parent polynucleotide that  
 CC encodes the polypeptide; (6) a method of enhancing the quality of a  
 CC selected phenotype that is displayed by an organism of interest or part  
 CC and that results from the expression of a parent polynucleotide that  
 CC encodes the polypeptide; and (7) a method of reducing the quality of a  
 CC selected phenotype that is displayed by an organism of interest or part  
 CC and that results from the expression of a parent polynucleotide that  
 CC encodes the polypeptide. The method is useful for constructing a  
 CC synthetic polynucleotide from which a polypeptide is producible to confer  
 CC a selected phenotype to an organism of interest or part in a different  
 CC quality than that conferred by a parent polynucleotide that encodes the  
 CC same polypeptide. It is useful for modulating the quality of a selected  
 CC phenotype displayed by an organism or part. The present sequence encodes  
 CC a synthetic leader sequence, which is used in an example from the present  
 CC invention.

XX Sequence 18 BP; 0 A; 6 C; 0 G; 12 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1653 AAGAAAAATAGAGAA 1669

Db 18 AAGAGAGAGAGAGAGAA 2

RESULT 352

ADO26686/c

ID ADO26686 standard; DNA; 18 BP.

XX ADO26686;

XX 12-AUG-2004 (first entry)

XX Synthetic leader sequence encoding DNA SEQ ID NO:79.

XX phenotype; phenotypic preference; phenotype modulation; leader; ds.

XX Synthetic.

XX WO2004042059-A1.

XX 21-MAY-2004.

XX 10-NOV-2003; 2003WO-AU001487.

XX 08-NOV-2002; 2002US-0425163P.

XX (UYQU ) UNIV QUEENSLAND.

XX Frazer IH;

XX WPI; 2004-411519/38.

XX P-PSDB; ADO26687.

XX Constructing synthetic polynucleotide for modulating the quality of a  
 PT selected phenotype displayed by an organism comprises replacing a first  
 PT codon with a synonymous codon to construct the synthetic polynucleotide.

PS Example 1; SEQ ID NO 79; 86pp; English.

XX The present invention describes a method for constructing a synthetic  
 CC polynucleotide from which a polypeptide is producible to confer a  
 CC selected phenotype to an organism of interest or part in a different  
 CC quality than that conferred by a parent polynucleotide that encodes the

CC same polypeptide. The method comprises: (a) selecting a first codon of  
CC the parent polynucleotide for replacement with a synonymous codon, where  
CC the synonymous codon is selected on the basis that it exhibits a  
CC different phenotypic preference than the first codon in a comparison of  
CC phenotypic preferences in test organisms or parts, where the test  
CC organism are selected from organisms of the same species as the organism  
CC of interest and organisms that are related to the organisms of interest;  
CC and (b) replacing the first codon with the synonymous codon to construct  
CC the synthetic polynucleotide. Also described: (1) a method for  
CC determining the phenotypic preference of a first codon in an organism of  
CC interest or its parts; (2) a synthetic polynucleotide constructed from  
CC the method above; (3) an organism or interest or part containing a  
CC synthetic polynucleotide constructed from the method above; (4) an  
CC organism or interest or part containing a synthetic construct that  
CC comprises a regulatory polynucleotide operably linked to a tandem repeat  
CC of a first codon fused in frame with a reporter polynucleotide that  
CC encodes a reporter protein, which produces, or is predicted to produce a  
CC selected phenotype or a phenotype of the same class as the selected  
CC phenotype in the organism or part; (5) a method of modulating the quality  
CC of a selected phenotype that is displayed by an organism of interest or  
CC part and that results from the expression of a parent polynucleotide that  
CC encodes the polypeptide; (6) a method of enhancing the quality of a  
CC selected phenotype that is displayed by an organism of interest or part  
CC and that results from the expression of a parent polynucleotide that  
CC encodes the polypeptide; and (7) a method of reducing the quality of a  
CC selected phenotype that is displayed by an organism of interest or part  
CC and that results from the expression of a parent polynucleotide that  
CC encodes the polypeptide. The method is useful for constructing a  
CC synthetic polynucleotide from which a polypeptide is producible to confer  
CC a selected phenotype to an organism of interest or part in a different  
CC quality than that conferred by a parent polynucleotide that encodes the  
CC same polypeptide. It is useful for modulating the quality of a selected  
CC phenotype displayed by an organism or part. The present sequence encodes  
CC a synthetic leader sequence, which is used in an example from the present  
CC invention.

XX Sequence 18 BP; 0 A; 6 C; 0 G; 12 T; 0 U; 0 Other;

SQ Query Match 0.7%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1653 AAGAAAATAAGAGAA 1669

Db 17 AAGAGAGAGAGAGAA 1

RESULT 353

ADO26680

XX ID ADO26680 standard; DNA; 18 BP.

XX AC ADO26680;

XX DT 12-AUG-2004 (first entry)

XX Synthetic leader sequence encoding DNA SEQ ID NO:73.

XX phenotype; phenotypic preference; phenotype modulation; leader; ds.

XX Synthetic.

XX PN WO2004042059-A1.

XX PD 21-MAY-2004.

XX PF 10-NOV-2003; 2003WO-AU001487.

XX PR 08-NOV-2002; 2002US-0425163P.

XX PA (UYQU ) UNIV QUEENSLAND.

XX PI Frazer IH;

DR WPI; 2004-411519/38.  
XX P-PSDB; ADO26681.

PT Constructing synthetic polynucleotide for modulating the quality of a  
PT selected phenotype displayed by an organism comprises replacing a first  
PT codon with a synonymous codon to construct the synthetic polynucleotide.  
XX Example 1; SEQ ID NO 73; 86pp; English.

XX The present invention describes a method for constructing a synthetic  
CC polynucleotide from which a polypeptide is producible to confer a  
CC selected phenotype to an organism of interest or part in a different  
CC quality than that conferred by a parent polynucleotide that encodes the  
CC same polypeptide. The method comprises: (a) selecting a first codon of  
CC the parent polynucleotide for replacement with a synonymous codon, where  
CC the synonymous codon is selected on the basis that it exhibits a  
CC different phenotypic preference than the first codon in a comparison of  
CC phenotypic preferences in test organisms or parts, where the test  
CC organism are selected from organisms of the same species as the organism  
CC of interest and organisms that are related to the organisms of interest;  
CC and (b) replacing the first codon with the synonymous codon to construct  
CC the synthetic polynucleotide. Also described: (1) a method for  
CC determining the phenotypic preference of a first codon in an organism of  
CC interest or its parts; (2) a synthetic polynucleotide constructed from  
CC the method above; (3) an organism or interest or part containing a  
CC synthetic polynucleotide constructed from the method above; (4) an  
CC organism or interest or part containing a synthetic construct that  
CC comprises a regulatory polynucleotide operably linked to a tandem repeat  
CC of a first codon fused in frame with a reporter polynucleotide that  
CC encodes a reporter protein, which produces, or is predicted to produce a  
CC selected phenotype or a phenotype of the same class as the selected  
CC phenotype in the organism or part; (5) a method of modulating the quality  
CC of a selected phenotype that is displayed by an organism of interest or  
CC part and that results from the expression of a parent polynucleotide that  
CC encodes the polypeptide; (6) a method of enhancing the quality of a  
CC selected phenotype that is displayed by an organism of interest or part  
CC and that results from the expression of a parent polynucleotide that  
CC encodes the polypeptide; and (7) a method of reducing the quality of a  
CC selected phenotype that is displayed by an organism of interest or part  
CC and that results from the expression of a parent polynucleotide that  
CC encodes the polypeptide. The method is useful for constructing a  
CC synthetic polynucleotide from which a polypeptide is producible to confer  
CC a selected phenotype to an organism of interest or part in a different  
CC quality than that conferred by a parent polynucleotide that encodes the  
CC same polypeptide. It is useful for modulating the quality of a selected  
CC phenotype displayed by an organism or part. The present sequence encodes  
CC a synthetic leader sequence, which is used in an example from the present  
CC invention.

SQ Sequence 18 BP; 12 A; 0 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1653 AAGAAAATAAGAGAA 1669

Db 1 AAGAGAGAGAGAGAA 17

RESULT 354

ADO26646

ID ADO26646 standard; DNA; 18 BP.

XX AC ADO26646;

XX DT 12-AUG-2004 (first entry)

XX Synthetic leader sequence encoding DNA SEQ ID NO:39.

XX phenotype; phenotypic preference; phenotype modulation; leader; ds.

XX Synthetic.

XX PN WO2004042059-A1.  
XX PD 21-MAY-2004.  
XX PF 10-NOV-2003; 2003WO-AU001487.  
XX PR 08-NOV-2002; 2002US-0425163P.  
XX PA (UYQU ) UNIV QUEENSLAND.  
XX PI Frazer IH;  
XX DR WPI; 2004-411519/38.  
XX DR P-PSDB; ADO26647.  
XX PT Constructing synthetic polynucleotide for modulating the quality of a  
XX PT selected phenotype displayed by an organism comprises replacing a first  
XX PT codon with a synonymous codon to construct the synthetic polynucleotide.  
XX PS Example 1; SEQ ID NO 39; 86pp; English.  
XX CC The present invention describes a method for constructing a synthetic  
XX CC polynucleotide from which a polypeptide is producible to confer a  
XX CC selected phenotype to an organism of interest or part in a different  
XX CC quality than that conferred by a parent polynucleotide that encodes the  
XX CC same polypeptide. The method comprises: (a) selecting a first codon of  
XX CC the parent polynucleotide for replacement with a synonymous codon, where  
XX CC the synonymous codon is selected on the basis that it exhibits a  
XX CC different phenotypic preference than the first codon in a comparison of  
XX CC phenotypic preferences in test organisms or parts, where the test  
XX CC organism are selected from organisms of the same species as the organism  
XX CC of interest and organisms that are related to the organisms of interest;  
XX CC and (b) replacing the first codon with the synonymous codon to construct  
XX CC the synthetic polynucleotide. Also described: (1) a method for  
XX CC determining the phenotypic preference of a first codon in an organism of  
XX CC interest or its parts; (2) a synthetic polynucleotide constructed from  
XX CC the method above; (3) an organism of interest or part containing a  
XX CC synthetic polynucleotide constructed from the method above; (4) an  
XX CC organism of interest or part containing a synthetic construct that  
XX CC comprises a regulatory polynucleotide operably linked to a tandem repeat  
XX CC of a first codon fused in frame with a reporter polynucleotide that  
XX CC encodes a reporter protein, which produces, or is predicted to produce a  
XX CC selected phenotype or a phenotype of the same class as the selected  
XX CC phenotype in the organism or part; (5) a method of modulating the quality  
XX CC of a selected phenotype that is displayed by an organism of interest or  
XX CC part and that results from the expression of a parent polynucleotide that  
XX CC encodes the polypeptide; (6) a method of enhancing the quality of a  
XX CC selected phenotype that is displayed by an organism of interest or part  
XX CC and that results from the expression of a parent polynucleotide that  
XX CC encodes the polypeptide; and (7) a method of reducing the quality of a  
XX CC selected phenotype that is displayed by an organism of interest or part  
XX CC and that results from the expression of a parent polynucleotide that  
XX CC encodes the polypeptide. The method is useful for constructing a  
XX CC synthetic polynucleotide from which a polypeptide is producible to confer  
XX CC a selected phenotype to an organism of interest or part in a different  
XX CC quality than that conferred by a parent polynucleotide that encodes the  
XX CC same polypeptide. It is useful for modulating the quality of a selected  
XX CC phenotype displayed by an organism or part. The present sequence encodes  
XX CC a synthetic leader sequence, which is used in an example from the present  
XX CC invention.  
XX SQ Sequence 18 BP; 12 A; 0 C; 6 G; 0 T; 0 U; 0 Other;  
Query Match 0.7%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1653 AAGAAATATAGAGAA 1669  
DB 2 AAGAAAGAAAGAGAA 18  
|||||

RESULT 355  
ADS90612  
ID ADS90612 standard; DNA; 18 BP.  
XX  
AC ADS90612;  
XX  
DT 18-NOV-2004 (first entry)  
XX  
DE Oligonucleotide of the invention SEQ ID NO:1628.  
XX  
KW ss; cell proliferative disorder; breast; methylation; cytostatic;  
KW gene therapy; single nucleotide polymorphism; SNP.  
XX  
OS Unidentified.  
XX  
PN WO2004035803-A2.  
XX  
PD 29-APR-2004.  
XX  
PF 01-OCT-2003; 2003WO-EP010881.  
XX  
PR 01-OCT-2002; 2002DE-01045779.  
PR 07-JAN-2003; 2003DE-01000096.  
PR 17-APR-2003; 2003DE-01017955.  
XX  
PA (EPIG-) EPIGENOMICS AG.  
XX  
PI Foekens J, Harbeck N, Koenig T, Maier S, Martens J, Model F;  
PI Nimmrich I, Rujan T, Schmitt A, Schmitt M, Look MP, Marx A;  
XX  
DR WPI; 2004-348468/32.  
XX  
PT Predicting responsiveness of a subject with breast cell proliferative  
PT disorder, useful for treating or differentiating breast cell  
PT proliferative disorders comprises analyzing methylation pattern of a  
PT genomic DNA from the subject.  
XX  
PS Disclosure; SEQ ID NO 1628; 104pp; English.  
XX  
CC The invention relates to a novel method for predicting the responsiveness  
CC of a subject with a cell proliferative disorder of the breast tissues to  
CC a therapy comprising analysing the methylation pattern of a target  
CC nucleic acid by contacting at least one of the target nucleic acids in a  
CC biological sample obtained from the subject prior to or during treatment.  
CC The method of the invention has cytostatic activity, and may have a use  
CC in gene therapy. The set of oligonucleotides comprising at least two of  
CC the oligomers are useful for detecting the cytosine methylation state  
CC and/or single nucleotide polymorphisms (SNPs) within the sequences. The  
CC methods, nucleic acid, oligonucleotide, and kit are useful for the  
CC treatment, characterisation, classification and/or differentiation, of  
CC breast cell proliferative disorders. The method is also useful for  
CC predicting the responsiveness of a subject with a cell proliferative  
CC disorder of the breast tissues to a therapy. The present sequence is used  
CC in the exemplification of the invention.  
XX SQ Sequence 18 BP; 3 A; 0 C; 6 G; 9 T; 0 U; 0 Other;  
Query Match 0.7%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 414 GAATGTTTAAAGTATGTT 430  
DB 2 GAATGTTTAAAGTATGTT 18  
|||||

Query Match 0.7%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 88.2%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 1653 AAGAAATATAGAGAA 1669  
DB 2 AAGAAAGAAAGAGAA 18  
|||||

RESULT 356  
ADS90886/c  
ID ADS90886 standard; DNA; 18 BP.  
XX  
AC ADS90886;  
XX  
DT 18-NOV-2004 (first entry)

XX DE Oligonucleotide of the invention SEQ ID NO:1902.  
 XX KW ss; cell proliferative disorder; breast; methylation; cytostatic;  
 KW KW gene therapy; single nucleotide polymorphism; SNP.  
 XX KW Unidentified.  
 OS WO2004035803-A2.  
 XX XX  
 XX PD 29-APR-2004.  
 XX XX  
 XX PF 01-OCT-2003; 2003WO-BF010881.  
 XX XX  
 XX PR 01-OCT-2002; 2002DE-01045779.  
 PR 07-JAN-2003; 2003DE-01000096.  
 PR 17-APR-2003; 2003DE-01017955.  
 XX XX  
 XX PA (EPITG-) EPIGENOMICS AG.  
 XX XX  
 XX PI Foekens J, Harbeck N, Koenig T, Maier S, Martens J, Model F;  
 PI Nimmrich I, Rujan T, Schmitt A, Schmitt M, Look MP, Marx A;  
 XX XX  
 DR WPI; 2004-348468/32.  
 XX XX  
 XX PT Predicting responsiveness of a subject with breast cell proliferative  
 PT disorder, useful for treating or differentiating breast cell  
 PT proliferative disorders comprises analyzing methylation pattern of a  
 PT genomic DNA from the subject.  
 XX XX  
 XX PS Disclosure; SEQ ID NO 1902; 104pp; English.  
 XX XX  
 CC The invention relates to a novel method for predicting the responsiveness  
 CC of a subject with a cell proliferative disorder of the breast tissues to  
 CC a therapy comprising analysing the methylation pattern of a target  
 CC nucleic acid by contacting at least one of the target nucleic acids in a  
 CC biological sample obtained from the subject prior to or during treatment.  
 CC The method of the invention has cytostatic activity, and may have a use  
 CC in gene therapy. The set of oligonucleotides comprising at least two of  
 CC the oligomers are useful for detecting the cytosine methylation state  
 CC and/or single nucleotide polymorphisms (SNPs) within the sequences. The  
 CC methods, nucleic acid, oligonucleotide, and kit are useful for the  
 CC treatment, characterisation, classification and/or differentiation, of  
 CC breast cell proliferative disorders. The method is also useful for  
 CC predicting the responsiveness of a subject with a cell proliferative  
 CC disorder of the breast tissues to a therapy. The present sequence is used  
 CC in the exemplification of the invention.  
 XX XX  
 XX SQ Sequence 18 BP; 9 A; 0 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 13.8; DB 1; Length 18;  
 Best Local Similarity 88.2%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 162 ATCTTCTCATGCTTCT 178  
 Db 17 ATCTTATCATCTTCT 1  
 RESULT 357  
 AAT56997  
 ID AAT56997 standard; RNA; 15 BP.  
 XX XX  
 XX AC AAT56997;  
 XX XX  
 XX DT 27-AUG-2003 (revised)  
 DT 25-MAR-2003 (revised)  
 DT 24-APR-1997 (first entry)  
 XX XX  
 DE RSV 1C hammerhead ribozyme target sequence (nt. position 250).  
 XX XX  
 XX KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;  
 KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;

XX KW intercellular adhesion molecule; rel A; tumour necrosis factor;  
 KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;  
 KW translocation; chronic myelogenous leukaemia; CML; cancer;  
 KW Philadelphia chromosome; inflammation; autoimmune disease;  
 KW atherosclerosis; myocardial infarction; stroke; restenosis;  
 KW transplant rejection; rheumatoid arthritis; psoriasis;  
 KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;  
 KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;  
 XX ss.  
 XX XX  
 OS Respiratory syncytial virus.  
 XX XX  
 XX PN WO9523225-A2.  
 XX XX  
 XX PD 31-AUG-1995.  
 XX XX  
 XX PF 23-FEB-1995; 95WO-IB000156.  
 XX XX  
 XX PR 23-FEB-1994; 94US-00201109.  
 PR 29-MAR-1994; 94US-00218934.  
 PR 04-APR-1994; 94US-00222795.  
 PR 07-APR-1994; 94US-00224483.  
 PR 15-APR-1994; 94US-00227958.  
 PR 15-APR-1994; 94US-00228041.  
 PR 18-MAY-1994; 94US-00245736.  
 PR 06-JUL-1994; 94US-00271280.  
 PR 15-AUG-1994; 94US-00291932.  
 PR 16-AUG-1994; 94US-00291433.  
 PR 17-AUG-1994; 94US-00292620.  
 PR 19-AUG-1994; 94US-00293520.  
 PR 02-SEP-1994; 94US-00300000.  
 PR 08-SEP-1994; 94US-00303039.  
 PR 23-SEP-1994; 94US-00311486.  
 PR 23-SEP-1994; 94US-00311749.  
 PR 28-SEP-1994; 94US-00314397.  
 PR 03-OCT-1994; 94US-00316771.  
 PR 07-OCT-1994; 94US-00319492.  
 PR 11-OCT-1994; 94US-00321993.  
 PR 04-NOV-1994; 94US-00334847.  
 PR 10-NOV-1994; 94US-00337608.  
 PR 28-NOV-1994; 94US-00345516.  
 PR 16-DEC-1994; 94US-00357577.  
 PR 23-DEC-1994; 94US-00363233.  
 PR 30-JAN-1995; 95US-00380734.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 XX XX  
 XX PI Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;  
 PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;  
 PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;  
 PI Tracz D, Usman N, Wincott FE, Woolf T;  
 XX WPI; 1995-351090/45.  
 XX XX  
 XX PT Ribozymes having modified bases and methods for producing them - for use  
 PT in inhibiting disease related genes.  
 XX XX  
 XX PS Claim 2; Page 269; 407pp; English.  
 XX XX  
 CC The present sequence represents a preferred target sequence for an  
 CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves mRNA coding for a  
 CC protein of respiratory syncytial virus (RSV) at the nucleotide base  
 CC position indicated in the DB line. Regions of the mRNA that do not form  
 CC secondary folding structures and that contain potential hammerhead and  
 CC hairpin ribozyme cleavage sites were identified by computer analysis.  
 CC Ribozymes directed against these mRNA sequences were designed and  
 CC synthesised with modifications that improve their nuclease resistance.  
 CC The ribozymes cleave the target sequences and can be used for treatment  
 CC and diagnosis of RSV infection. (Updated on 25-MAR-2003 to correct PI  
 CC field.) (Updated on 27-AUG-2003 to correct OS field.)  
 XX Sequence 15 BP; 4 A; 3 C; 2 G; 0 T; 6 U; 0 Other;



Query Match 0.7%; Score 13.4; DB 1; Length 15;  
 Best Local Similarity 60.0%; Pred. No. 1.8e+02;  
 Matches 9; Conservative 5; Mismatches 1; Indels 0; Gaps 0;

QY 1101 TGATATATGCGCTAA 1115  
 :||: :|||:|  
 Db 1 UGAUUUGGCCUNA 15

RESULT 358  
 AAV32751/c  
 ID AAV32751 standard; DNA; 15 BP.  
 XX  
 AC AAV32751;  
 XX  
 DT 12-OCT-1998 (first entry)  
 XX  
 DE GST-pi mRNA antisense oligonucleotide 341-transition-AS-ON.  
 XX  
 KW Glutathione S-transferase; GST-pi gene; hGSTP1\*C; human; tumour; cancer;  
 KW leukaemia; lymphoma; melanoma; glioma; therapy; diagnosis; antisense; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 FT Key Location/Qualifiers  
 FT modified\_base 1..3 /tag= a  
 FT /note= "phosphorothioate linkage"  
 FT modified\_base 13..15  
 FT /tag= b  
 FT /note= "phosphorothioate linkage"  
 FT  
 XX  
 PN WO9821359-A1.  
 XX  
 PD 22-MAY-1998.  
 XX  
 PF 12-NOV-1997; 97WO-US020987.  
 XX  
 PR 12-NOV-1996; 96US-00747536.  
 XX  
 PA (TEXA ) UNIV TEXAS SYSTEM.  
 PA (UMIS ) UNIV MISSISSIPPI.  
 XX  
 PI Ali-Osman F, Lopez-Berestein G, Buolamwini JK, Antoun G, Lo H;  
 PI Keller C, Akande O;  
 XX  
 DR WPI; 1998-297961/26.  
 XX  
 PT New human glutathione S-transferase variant(s) - used as targets for the  
 PT diagnosis, prevention and treatment of tumours, including leukaemias,  
 PT lymphomas and melanomas.  
 XX  
 PS Example 4; Page 119; 200pp; English.  
 XX  
 CC Antisense oligonucleotides 313-antisense-ON, 313-transition-AS-ON, 341-  
 CC antisense-ON and 341-transition-AS-PN (see AAV32748-51) are based on the  
 CC transition sites of human glutathione S-transferase (GST)-pi hGSTP1\*C  
 CC mRNA (see AAV32718). hGSTP1\*C cDNA contains nucleotide transitions of A  
 CC to G at 313 and C to T at 341. It was shown that translation of hGSTP1\*C  
 CC mRNA is more effectively inhibited by AS-ONs containing the corresponding  
 CC antisense transition nucleotides than consensus AS-ONs that do not  
 CC contain these transitions. This indicates that expression of variant GST-  
 CC pi genes can be down-regulated by targeting their transition regions  
 CC with AS-ONs, allowing differential and specific down-regulation of the  
 CC different GST-pi variants in cells. Certain variants of GST-pi are  
 CC overexpressed in gliomas. Novel methods for the diagnosis, prevention and  
 CC treatment of tumours are based on the differential involvement of variant  
 CC forms of GST-pi (see also AAW49013-14)  
 XX  
 SQ Sequence 15 BP; 3 A; 6 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.4; DB 1; Length 15;

Best Local Similarity 93.3%; Pred. No. 1.8e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 360 CCATGAGGTGGGCAA 374  
 :|||:|  
 Db 15 CTATGAGGTGGGCAA 1

RESULT 359  
 AAX54319/c  
 ID AAX54319 standard; DNA; 15 BP.  
 XX  
 AC AAX54319;  
 XX  
 DT 05-JUL-1999 (first entry)  
 XX  
 DE Inducible nitric oxide synthase antisense oligonucleotide.  
 XX  
 KW Antisense oligonucleotide; multiple target; antisense treatment;  
 KW impaired respiration; inflammation; lung disease;  
 KW pulmonary vasoconstriction; inflammation; allergic rhinitis;  
 KW acute asthma; allergy; asthma; impeded respiration;  
 KW respiratory distress syndrome; pain; cystic fibrosis;  
 KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;  
 KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;  
 KW colon cancer; breast cancer; lung cancer; pancreatic cancer;  
 KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;  
 KW prostate cancer; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9913886-A1.  
 XX  
 PD 25-MAR-1999.  
 XX  
 PF 17-SEP-1998; 98WO-US019419.  
 XX  
 PR 17-SEP-1997; 97US-0059160P.  
 PR 09-JUN-1998; 98US-00093972.  
 XX  
 PA (UYEC-) UNIV EAST CAROLINA.  
 XX  
 PI Nyce JW;  
 XX  
 DR WPI; 1999-229400/19.  
 XX  
 PT New antisense oligonucleotides used in treatment of, e.g. pulmonary  
 PT vasoconstriction.  
 XX  
 PS Disclosure; Page 62; 120pp; English.  
 XX  
 CC The specification describes antisense oligonucleotides (AAX52869-X55271)  
 CC directed against at least 2 mRNAs selected from target genes, coding and  
 CC non-coding regions of RNAs corresponding to target genes, gene initiation  
 CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-  
 CC end and the junction between coding and non-coding regions and all  
 CC segments of RNAs encoding proteins associated with one or more diseases,  
 CC conditions or mixtures. The antisense oligonucleotides may be derived  
 CC from sequences AAX5272-74. These multiple target oligonucleotides  
 CC (specifically AAX5180-271) can be used for the antisense treatment of  
 CC diseases and conditions. Typical diseases and conditions are those  
 CC associated with impaired respiration and inflammation, including lung  
 CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,  
 CC acute asthma, allergies, asthma, impeded respiration, respiratory  
 CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,  
 CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary  
 CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.  
 CC colon cancer, breast cancer, lung cancer, pancreatic cancer,  
 CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as  
 CC well as all types of cancers which may metastasize or have metastasized  
 CC to the lungs, including breast and prostate cancer  
 XX  
 SQ Sequence 15 BP; 0 A; 4 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.4; DB 1; Length 15;  
Best Local Similarity 93.3%; Pred. No. 1.8e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1541 CGGCAAGCAGCAGAA 1555  
| | | | | | | | | |  
Db 15 CAGCAAGCAGCAGAA 1

RESULT 360  
AAA33763/c  
ID AAA33763 standard; DNA; 15 BP.  
XX  
AC AAA33763;  
XX  
XX  
DT 28-JUL-2000 (first entry)  
DE Low adenosine antisense oligonucleotide SEQ ID NO:1452.  
XX  
KW Human; adenosine receptor; low adenosine antisense oligonucleotide;  
KW phosphorothioate; impaired respiration; inflammation; allergy;  
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;  
KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;  
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;  
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;  
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;  
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO200009525-A2.  
XX  
PD 24-FEB-2000.  
XX  
PF 03-AUG-1999; 99WO-US017712.  
PR 03-AUG-1998; 98US-0095212P.  
XX  
PA (UYEC-) UNIV EAST CAROLINA.  
XX  
PI Nyce JW;  
DR WPI; 2000-205971/18.  
XX  
XX New antisense oligonucleotides useful for treating e.g. pulmonary  
PT vasoconstriction, inflammation, allergies, asthma, hypertension,  
PT bronchitis, emphysema, respiratory distress syndrome, ischemia or  
PT cancers.  
XX  
PS Claim 18; Page 446; 1343pp; English.

XX  
CC The present invention describes a new composition comprising an antisense  
CC oligonucleotide (ON) with low adenosine (up to 15%), which targets  
CC nucleic acids involved in bronchoconstriction, allergies, and/or  
CC inflammation. The ON can have antiinflammatory, antiallergic,  
CC antiasthmatic, cytostatic and analgesic activities. The compositions are  
CC useful for the treatment of diseases associated with inflammation,  
CC impaired airways, including lung disease and diseases whose secondary  
CC effects afflict the lungs of a subject. They can be used for treating  
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,  
CC impeded respiration, respiratory distress syndrome, pain, cystic  
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive  
CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,  
CC carcinomas, and cancers which may metastasise to the lungs, including  
CC breast and prostate cancer. The reduction of the adenosine content of the  
CC ONs reduces side effects. The A-containing ONs break down with the  
CC release of deoxyadenosine which activates adenosine receptors causing  
CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the  
CC nucleotide sequences given in the sequence listing from the present  
CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185  
CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ  
CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to

CC AAA33992) are specifically claimed ONs from the present invention. N.B.  
CC Sequences given in the disclosure of the present invention do not match  
CC up with their corresponding SEQ ID NO: sequences given in the sequence  
CC listing  
XX  
SQ Sequence 15 BP; 0 A; 4 C; 4 G; 7 T; 0 U; 0 Other;  
Query Match 0.7%; Score 13.4; DB 1; Length 15;  
Best Local Similarity 93.3%; Pred. No. 1.8e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1541 CGGCAAGCAGCAGAA 1555  
| | | | | | | | | |  
Db 15 CAGCAAGCAGCAGAA 1

RESULT 361  
AAZ97937  
ID AAZ97937 standard; DNA; 15 BP.  
XX  
AC AAZ97937;  
XX  
DT 15-SEP-2003 (revised)  
DT 26-APR-2000 (first entry)  
XX  
DE HIV-1 protease gene probe SEQ ID NO:427.  
XX  
KW Human immunodeficiency virus; HIV; protease; probe; detection;  
KW drug selected mutation; hybridisation; genotyping; infection;  
KW drug resistance; ss.  
XX  
OS Human immunodeficiency virus 1.  
XX  
PN WO9967428-A2.  
XX  
PD 29-DEC-1999.  
XX  
PF 22-JUN-1999; 99WO-EP004317.  
PR 24-JUN-1998; 98EP-00870143.  
XX  
XX (INNO-) INNOGENETICS NV.  
XX  
PI Stuyver L;  
DR WPI; 2000-147219/13.  
XX  
XX Detection of drug-selected mutations in the HIV protease gene used to  
PT treat HIV infections.  
XX  
PS Claim 3; Page 43; 76pp; English.

XX  
CC The present invention describes the detection of drug-selected mutations  
CC in the HIV protease gene. The method of detection allows the simultaneous  
CC characterisation of a range of codons involved in drug resistance using  
CC sets of probes optimised to function together in a reverse-hybridisation  
CC assay. AAZ97517 to AAZ97997 represent specifically claimed HIV  
CC in the assay, and AAZ97479 to AAZ97501 represent specifically claimed HIV  
CC protease gene polymorphic nucleotide sequences. AAZ97502 to AAZ97515, and  
CC AAZ98004 to AAZ98007, represent PCR primers for the HIV protease gene, the  
CC and AAZ97516 represents an HIV protease probe used in an example from the  
CC present invention. The method, probes and primers can be used for the  
CC detection of drug-selected mutations in the HIV protease gene. The method  
CC allows the simultaneous characterisation of a range of codons involved in  
CC drug resistance. The method may also be used for HIV protease genotyping  
CC assays. The probes are able to discriminate between wild type and mutated  
CC protease sequences. The method allows rapid and reliable detection of  
CC drug-selected mutation in HIV. (Updated on 15-SEP-2003 to standardise OS  
CC field)  
XX  
SQ Sequence 15 BP; 3 A; 2 C; 4 G; 6 T; 0 U; 0 Other;  
Query Match 0.7%; Score 13.4; DB 1; Length 15;

Best Local Similarity 93.3%; Pred. No. 1.8e+02; Mismatches 0; Indels 1; Gaps 0;

QY 640 TGTGTACTCAGATTG 654  
 Db 1 TGTGTACTCAGATTG 15

RESULT 362  
 AA219885/c

ID AA219885 standard; DNA; 15 BP.

XX AA219885;

XX 14-MAR-2001 (first entry)

XX Human inducible nitric oxide synthase polynucleotide fragment #1452.

XX Low adenosine antisense oligonucleotide; phosphorothioate; allergy;  
 KW human; airway disorder; bronchoconstriction; lung inflammation;  
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;  
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;  
 KW respiratory obstruction; pulmonary obstruction; impeded respiration;  
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;  
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;  
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;  
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;  
 KW cancer; ss.

XX Homo sapiens.

OS WO200062736-A2.

XX 26-OCT-2000.

XX 24-MAR-2000; 2000WO-US008020.

XX 06-APR-1999; 99US-0127958P.

XX (UYEC-) UNIV EAST CAROLINA.

XX (NYCE/) NYCE J W.

XX Nyce JW;

XX WPI; 2000-679539/66.

XX Low adenosine (A) content antisense oligonucleotides which do not trigger  
 PT adenosine receptors during metabolism, useful e.g. for treating cancers  
 PT and respiratory obstructions.

XX Claim 14; Page 256; 1592pp; English.

XX The present invention describes low adenosine (A) content antisense  
 CC oligonucleotides and compositions (I) comprising them. In the antisense  
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.  
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,  
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.  
 CC The antisense oligonucleotides and (I) can be used to down-regulate the  
 CC expression and/or activity of target polypeptides associated with  
 CC lung/respiratory disorders and malignancies, such as stimulating and  
 CC activating peptide factors and transmitters, transcription factors,  
 CC immunoglobulins and antibodies, antibody receptors, cytokines and  
 CC chemokines, endogenously produced specific and non-specific enzymes,  
 CC binding proteins, adhesion molecules and their receptors, cytokine and  
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central  
 CC nervous system (CNS) and peripheral nervous and non-nervous system  
 CC receptors, CNS and peripheral nervous and non-nervous system peptide  
 CC transmitters, defensins, growth factors, vasoactive peptides and  
 CC receptors, binding proteins and malignancy associated proteins. The  
 CC antisense oligonucleotides may be used in this way to treat disorders  
 CC including respiratory obstruction (especially pulmonary obstruction  
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or  
 CC surfactant hypoproduction which are associated with a disease or

CC condition selected from pulmonary vasoconstriction, inflammation,  
 CC allergies, asthma, impeded respiration, respiratory distress syndrome  
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary  
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),  
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,  
 CC and/or cancer. AA218434 to AA21543 represent human polynucleotide  
 CC fragments and antisense oligonucleotides used in the exemplification of  
 CC the present invention

XX

XX Sequence 15 BP; 0 A; 4 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.4; DB 1; Length 15;  
 Best Local Similarity 93.3%; Pred. No. 1.8e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1541 CGCAGCAGCAGCAGAA 1555  
 Db 15 CAGCAGCAGCAGAA 1

RESULT 363  
 AA217162/c

ID AA217162 standard; DNA; 15 BP.

XX AA217162;

XX 08-AUG-2001 (first entry)

XX Rhodococcus specific PCR primer.

XX Rhodococcus; nitrile hydratase; amidase; PCR primer; ss.

XX Rhodococcus sp.

XX JP2001069978-A.

XX 21-MAR-2001.

XX 02-SEP-1999; 99JP-00248162.

XX 02-SEP-1999; 99JP-00248162.

XX (SHOW ) SHOWA DENKO KK.

XX WPI; 2001-288272/30.

XX Nitrile hydratase gene and amidase gene derived from a Rhodococcus genus  
 PT microbe.

XX Example 4; Page 5; 11pp; Japanese.

XX This invention relates to a nitrile hydratase gene derived from a  
 CC Rhodococcus genus microbe. Included in the invention is an amidase gene  
 CC also derived from a Rhodococcus genus microbe. The genes are used in the  
 CC production of nitrile hydratase and amidase for use for the production of  
 CC compounds. The present sequence represents a PCR primer used in the  
 CC course of the invention

XX

XX Sequence 15 BP; 2 A; 5 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.4; DB 1; Length 15;  
 Best Local Similarity 93.3%; Pred. No. 1.8e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1122 GTCGCGCGCAGTGC 1136  
 Db 15 GTCGCGCGCAGTGC 1

RESULT 364  
 AA21849/c

ID AA21849 standard; DNA; 15 BP.

XX



[illegible]

```

AC AAT91205;
XX
XX 18-DEC-1997 (first entry)
XX
DE Hairpin ribozyme recognition site in human hepatitis B virus BR2.
XX
XX Hairpin ribozyme; inhibition; replication; infectivity; HBV;
KW hepatitis B virus; hepatic; human; ss.
XX
OS Hepatitis B virus.
XX
FH Key Location/Qualifiers
FT misc_feature 5..6
FT FT /tag= a
FT FT /standard_name= "Cleavage_Site"
XX
XX WO708309-A2.
XX
XX 06-MAR-1997.
XX
XX 29-AUG-1996; 96WO-US013975.
XX
XX 29-AUG-1995; 95US-00521255.
XX
XX (IMMU-) IMMUSOL INC.
XX
XX Goldenberg T, Yu M, Welch PJ, Barber JR;
XX
XX WPI; 1997-179266/16.
XX
XX New hairpin ribozyme - for inhibiting replication and infectivity of
XX hepatitis B virus.
XX
XX Example 1; Page 17; 34pp; English.
XX
XX A new hairpin ribozyme has been developed which is able to inhibit
XX replication and infectivity of hepatitis B virus (HBV). The present
XX sequence represents a hairpin ribozyme recognition site in human HBV. The
XX hairpin ribozyme, and the nucleic acid encoding it, can be introduced
XX into a cell infected with HBV, or susceptible to infection, to inhibit
XX the replication/infectivity of HBV. Alternatively, cells transduced with
XX a vector ex vivo are administered to a patient. Hairpin ribozymes act on
XX pregenomic RNA and so are potentially capable of eliminating
XX (extra)hepatic replication and transport of HBV in all infected patients,
XX including chronic carriers. Also infection by hepatitis D (which requires
XX HBV surface antigen as its envelope) is prevented
XX
XX Sequence 16 BP; 1 A; 6 C; 6 G; 0 T; 3 U; 0 Other;
XX
XX Query Match 0.7%; Score 13.4; DB 1; Length 16;
XX Best Local Similarity 93.3%; Pred. No. 2.1e+02;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 511 TCAGCGCCACCGGA 525
Db 16 TCAGCGCCACCGGA 2
||||| |||||

RESULT 369
ADR69972/c
ID ADR69972 standard; DNA; 16 BP.
XX
XX ADR69972;
XX
XX 04-NOV-2004 (first entry)
XX
XX Human survivin gene modulatory oligonucleotide #40.
XX
XX ss; antiangiogenic; cytostatic; antiarteriosclerotic; antipsoriatic;
KW antidiabetic; ophthalmologic; antiarthritic; antirheumatic;
KW antialstematic; antiallergic; antiinflammatory; dermatological; anti-HIV;
KW virucide; survivin antagonist; apoptosis inhibitor;
KW cellular proliferation inhibitor; survivin; gene expression;

```

```

KW abnormal angiogenesis; chemotherapeutic agent; busulfan; myleran;
KW carboplatin; paraplatin; Taxol; doxorubicin; adriamycin; atherosclerosis;
KW psoriasis; diabetic retinopathy; rheumatoid arthritis; asthma; warts;
KW allergic dermatitis; cancer; tumour; sarcoma; glioma; carcinoma;
KW melanoma; osteosarcoma; Ewing's sarcoma; chondrosarcoma;
KW malignant fibrous histiocytoma; fibrosarcoma; Kaposi's sarcoma;
KW Paclitaxel; Docetaxel.
XX
XX Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..16
FT FT /tag= b
FT FT /mod_base= OTHER
FT FT /note= "OTHER = phosphorothioate internucleotide
FT linkages, all locked nucleic acid (LNA) residues are 5'-
FT methyl cytosine residues"
FT modified_base 1..4
FT FT /tag= a
FT FT /mod_base= OTHER
FT FT /note= "OTHER = beta-D-oxy-locked nucleic acid but
FT optionally DNA nucleotides, optionally phosphate
FT internucleotide linkages"
FT modified_base 13..16
FT FT /tag= c
FT FT /mod_base= OTHER
FT FT /note= "OTHER = beta-D-oxy-locked nucleic acid but
FT optionally DNA nucleotides, optionally phosphate
FT internucleotide linkages"
XX
XX WO2004069991-A2.
XX
XX 19-AUG-2004.
XX
XX 10-FEB-2004; 2004WO-DK000096.
XX
XX 10-FEB-2003; 2003DK-00000183.
PR 18-NOV-2003; 2003DK-00001708.
XX
XX (SANT-) SANTARIS PHARMA AS.
XX
XX Hansen B, Thruue CA, Petersen KD, Westergaard M, Wissenbach M;
XX WPI; 2004-625494/60.
XX
XX New locked nucleic acid containing oligomeric compound capable of
XX modulating survivin expression, useful for treating cancer such as breast
XX carcinoma, lung carcinoma, etc.
XX
XX Claim 1; SEQ ID NO 41; 122pp; English.
XX
XX The invention relates to an oligomeric compound (I) capable of modulating
XX survivin expression, having 8-50 nucleotides and/or nucleotide analogues,
XX where the compound comprises a subsequence of at least 8 nucleotides or
XX nucleotide analogues, where the subsequence is located within a sequence
XX chosen from one of 143 sequences given in the specification. (I) is
XX useful for treating a mammal suffering from or susceptible from a disease
XX caused by abnormal angiogenesis, by administering (I) containing one or
XX more LNA units that are targeted to survivin. (I) is useful as a
XX medicament and for the manufacture of a medicament for the treatment of
XX cancer, in combination with chemotherapeutic agent such as busulfan
XX (myleran), carboplatin (paraplatin), Taxol, doxorubicin (adriamycin),
XX etc. (I) or a conjugate (II) containing (I) is useful in the preparation
XX of a medicament for the treatment of atherosclerosis, psoriasis, diabetic
XX retinopathy, rheumatoid arthritis, asthma, warts and allergic dermatitis.
XX (I), (II) or a pharmaceutical (III) containing (I) is useful for treating
XX cancer in the form of a solid tumour, sarcoma, glioma or carcinoma chosen
XX from malignant melanoma, basal cell carcinoma, ovarian carcinoma, breast
XX carcinoma, non-small cell lung cancer, renal cell carcinoma, bladder
XX carcinoma, recurrent superficial bladder cancer, stomach carcinoma,
XX prostatic carcinoma, pancreatic carcinoma, lung carcinoma, cervical
XX carcinoma, cervical dysplasia, laryngeal papillomatosis, colon carcinoma,

```

CC colorectal carcinoma and carcinoid tumours. The malignant melanoma is  
CC chosen from superficial spreading melanoma, nodular melanoma, lentigo  
CC maligna melanoma, acral melanoma, amelanotic melanoma, and desmoplastic  
CC melanoma. The sarcoma is chosen from osteosarcoma, Ewing's sarcoma,  
CC chondrosarcoma, malignant fibrous histiocytoma, fibrosarcoma and Kaposi's  
CC sarcoma. The treatment further involves administration of a  
CC chemotherapeutic agent such as taxanes, preferably Taxol, Paclitaxel or  
CC docetaxel. (i), (ii) or (iii) is also useful for preventing or limiting  
CC apoptosis or for preventing cellular proliferation. This sequence  
CC corresponds to an antisense oligonucleotide targeted to the human  
CC survivin gene.

XX SQ Sequence 16 BP; 1 A; 3 C; 1 G; 11 T; 0 U; 0 Other;  
Query Match 0.7%; Score 13.4; DB 1; Length 16;  
Best Local Similarity 93.3%; Pred. No. 2.1e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1656 AAAATAAGAGAGAA 1670  
DB 16 AACATAAGAGAGAA 2

RESULT 370  
AAX69334  
ID AAX69334 standard; RNA; 17 BP.  
XX AC AAX69334;  
XX DT 28-JUL-1999 (first entry)  
XX DE Human flt1 VEGF receptor hamster ribozyme substrate #629.  
XX KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;  
XX KW KDR; hamster ribozyme; hairpin ribozyme; cleavage;  
XX KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;  
XX KW fms-like tyrosine kinase 1; Kinase insert domain containing receptor;  
XX KW foetal liver kinase 1; ss.  
XX OS Homo sapiens.  
XX PN WO9715662-A2.  
XX PD 01-MAY-1997.  
XX PF 25-OCT-1996; 96WO-US017480.  
XX PR 26-OCT-1995; 95US-0005974P.  
XX PR 11-JAN-1996; 96US-00584040.  
XX PA (RIBO-) RIBOZYME PHARM INC.  
XX PA (CHIR ) CHIRON CORP.  
XX PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;  
XX WPI; 1997-259017/23.  
XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA  
XX stability - useful for treating e.g. tumour angiogenesis, psoriasis,  
XX rheumatoid arthritis, etc., in a human patient.  
XX Claim 4; Page 65; 218pp; English.

XX The present invention describes nucleic acid molecules which modulate the  
XX synthesis, expression and/or stability of a mRNA encoding 1 or more  
XX receptors of vascular endothelial growth factor (VEGF). A patient  
XX (preferably human) having a condition associated with the level of the  
XX fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing  
XX receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour  
XX angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be  
XX treated by administering the nucleic acid molecule or the expression  
XX vector to the patient. AAX67275 to AAX75752 represent specific examples  
XX of nucleic acid molecules from the present invention

XX SQ Sequence 17 BP; 5 A; 1 C; 5 G; 0 T; 6 U; 0 Other;  
Query Match 0.7%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 66.7%; Pred. No. 2.3e+02;  
Matches 10; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 1707 GATGATGTCAGACAT 1721  
DB 1 GAUGAUGUCAGAUU 15

RESULT 371  
AAV97695  
ID AAV97695 standard; RNA; 17 BP.  
XX AC AAV97695;  
XX DT 17-MAR-1999 (first entry)  
XX DE Human EGF-R target sequence nucleotide position 4005.  
XX KW Human; epidermal growth factor receptor; EGFR; EGF-R; target sequence;  
XX KW hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;  
XX KW cancer; Genetic drift; detection; mutation; ss.  
XX OS Homo sapiens.  
XX PN WO9833893-A2.  
XX PD 06-AUG-1998.  
XX PF 14-JAN-1998; 98WO-US000730.  
XX PR 31-JAN-1997; 97US-0036476P.  
XX PR 04-DEC-1997; 97US-00985162.  
XX PA (RIBO-) RIBOZYME PHARM INC.  
XX PA (UYAS-) UNIV ASTON.  
XX PI Akhtar S, Fell P, Mcswiggen JA;  
XX WPI; 1998-437449/37.  
XX Enzymatic nucleic acids - which cleave RNA derived from an epidermal  
XX growth factor receptor, useful for inhibiting cell proliferation and for  
XX treating cancers.  
XX Claim 5; Page 78; 109pp; English.

XX The present invention describes enzymatic nucleic acid molecules (NAMs)  
XX which specifically cleave RNA derived from an epidermal growth factor  
XX receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090  
XX represent specifically claimed target sequence from human EGF-R. AAV98044  
XX to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and  
XX hairpin ribozymes respectively for human EGF-R. The NAMs are useful for  
XX cleaving EGF-R RNA in the treatment of a condition associated with EGFR  
XX expression levels e.g. to inhibit cell proliferation in the prevention or  
XX treatment of cancers. The NAMs can also be used as diagnostic tools to  
XX examine genetic drift and mutations within diseased cells or to detect  
XX the presence of EGF-R RNA in a cell

XX SQ Sequence 17 BP; 2 A; 4 C; 3 G; 0 T; 8 U; 0 Other;  
Query Match 0.7%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 53.3%; Pred. No. 2.3e+02;  
Matches 8; Conservative 6; Mismatches 1; Indels 0; Gaps 0;

QY 1246 AGTTCACCTCCTTTG 1260  
DB 1 AGUUGCAUCCUUG 15





Query Match 0.7%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.3e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1551 CAGAGAGAGAGAG 1565  
DB 16 CAGAGAGAGAGAG 2

RESULT 374  
AAZ20594  
ID AAA20594 standard; RNA; 17 BP.  
XX  
AC AAA20594;  
XX  
XX 19-JUN-2000 (first entry)  
XX  
DE Integrin alpha 6 subunit substrate sequence SEQ ID NO:3820.  
XX  
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIR-2; angiogenesis;  
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;  
KW hammerhead ribozyme; angiogenic factor; cytotatic; antidiabetic;  
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;  
KW dermatologic; RNA cleavage; cancer; diabetic retinopathy; arthritis;  
KW age related macular degeneration; inflammation; neovascular glaucoma;  
KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;  
KW tuberculous sclerosis; pot-wine stain; Sturge Weber syndrome;  
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO9950403-A2.  
XX  
PN 07-OCT-1999.  
XX  
XX 24-MAR-1999; 99WO-US000507.  
XX  
XX 27-MAR-1998; 98US-0079678P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;  
XX  
XX WPI; 1999-591315/50.  
XX  
PT Novel ribozymes for modulating the synthesis, expression and/or stability  
PT of an mRNA encoding an angiogenic factors.  
XX  
PS Claim 55; Page 155; 305pp; English.

The present invention describes enzymatic nucleic acid molecules with RNA  
cleaving activity, which specifically cleave RNA encoded by an aryl  
hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3  
gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to  
AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,  
and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their  
corresponding target sequences. AAA17685 to AAA18385 and AAA19087 to  
AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086  
and AAA19155 to AAA19222 represent their corresponding target sequences;  
AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme  
sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and  
AAA21596 to AAA21688 represent their corresponding target sequences;  
AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequences  
for integrin subunit beta 3, and AAA22476 to AAA23282, AAA23343 to  
AAA23422 represent their corresponding target sequences. The ribozymes of  
the invention are used for modulating the synthesis, expression and/or  
stability of an mRNA encoding angiogenic factor, especially ARNT,  
integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are  
especially used to treat cancer, diabetic retinopathy, age related  
macular degeneration (ARMD), inflammation, and arthritis, as well as  
neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,  
angiofibroma of tuberculous sclerosis, pot-wine stains, Sturge Weber

CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,  
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,  
CC integrin subunit alpha-6, or integrin subunit beta-3  
XX  
SQ Sequence 17 BP; 3 A; 6 C; 2 G; 0 T; 6 U; 0 Other;  
Query Match 0.7%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 66.7%; Pred. No. 2.3e+02;  
Matches 10; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 1798 CCCTGTCAGATTTCAG 1812  
DB 3 CCCUCACAGAUUCAG 17

RESULT 375  
AAV93573  
ID AAV93573 standard; RNA; 17 BP.  
XX  
AC AAV93573;  
XX  
XX 18-FEB-1999 (first entry)  
XX  
DE Human B-raf substrate nucleotide position 1758.  
XX  
KW Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;  
KW target; substrate; catalyst; modulation; expression; Raf gene; delivery;  
KW screening; identification; synthesis; deprotection; purification; cancer;  
KW inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;  
KW restenosis; rheumatoid arthritis; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO9850530-A2.  
XX  
PN 12-NOV-1998.  
XX  
XX 05-MAY-1998; 98WO-US009249.  
XX  
XX 09-MAY-1997; 97US-0046059P.  
XX  
PR 09-JUN-1997; 97US-0049002P.  
XX  
PR 03-JUL-1997; 97US-0051718P.  
XX  
PR 22-AUG-1997; 97US-0056808P.  
XX  
PR 02-OCT-1997; 97US-0061321P.  
XX  
PR 02-OCT-1997; 97US-0061324P.  
XX  
PR 05-NOV-1997; 97US-0064866P.  
XX  
PR 19-DEC-1997; 97US-0068212P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Bellon L;  
XX Parry T, Beigelman L, Mcswiggen JA, Karpeisky A, Burgin A;  
XX Thompson J, Workman CT, Beaudry A, Sweedler D;  
XX WPI; 1999-009494/01.  
XX  
XX Identifying new catalytic nucleic acid that modulates selected processes  
XX - especially ribozymes that cleave Raf RNA for treating cancer,  
PT restenosis, and also new ribozymes and modified nucleoside triphosphates  
PT used as antiviral agents and synthons.  
XX  
PS Claim 177; Page 170; 259pp; English.

A method has been developed for the identification of a nucleic acid  
capable of modulating a process in a biological system. The method  
comprises: (a) introducing into the system a random library of nucleic  
acid catalysts (NAC) having a substrate binding domain (SBD), comprising  
a random sequence, and a catalytic domain (CD); and (b) identifying NAC  
in systems where modulation has occurred and/or determining the sequence  
of at least part of the SBDs in such systems. Nucleic acid molecules with  
endonuclease activity and catalytic activity, from the present invention,  
are used to modulate gene expression in plant and mammalian cells and to  
cleave target nucleic acid, particularly for treating systemic diseases

CC caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic  
 CC ascites and infection. They may also be used to detect genetic drift and  
 CC mutations in diseased cells and to determine c-raf RNA. Specifically NACs  
 CC with RNA-cleaving activity that modulate expression of the Raf gene, are  
 CC used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or  
 CC generally any condition associated with the level of c-raf. Introduction  
 CC of sugar/phosphate modifications increases stability against nuclease and  
 CC activity. AAV90922 to AAV93877 represent NACs that can be used in the  
 CC method, specifically for modulating the expression of a Raf gene  
 XX  
 SQ Sequence 17 BP; 5 A; 5 C; 3 G; 0 T; 4 U; 0 Other;  
 Query Match 0.7%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 73.3%; Pred. No. 2.3e+02;  
 Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;  
 QY 1082 ATTACTACACGCCA 1096  
 Db |::||:|||||  
 3 AUUACUACACGCCA 17  
 RESULT 376  
 AAV93574  
 ID AAV93574 standard; RNA; 17 BP.  
 AC  
 AC AAV93574;  
 DT 18-FEB-1999 (first entry)  
 XX  
 DE Human B-raf substrate nucleotide position 1759.  
 KW Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;  
 KW target; substrate; catalyst; modulation; expression; Raf gene; delivery;  
 KW screening; identification; synthesis; deprotection; purification; cancer;  
 KW inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;  
 KW restenosis; rheumatoid arthritis; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO9850530-A2.  
 XX  
 PD 12-NOV-1998.  
 PF  
 PF 05-MAY-1998; 98WO-US009249.  
 XX  
 PR 09-MAY-1997; 97US-0046059P.  
 PR 09-JUN-1997; 97US-0049002P.  
 PR 03-JUL-1997; 97US-0051718P.  
 PR 22-AUG-1997; 97US-0056808P.  
 PR 02-OCT-1997; 97US-0061321P.  
 PR 02-OCT-1997; 97US-0061324P.  
 PR 05-NOV-1997; 97US-0064866P.  
 PR 19-DEC-1997; 97US-0068212P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Jarvis T, Matulis-Adamic J, Reynolds M, Kisich K, Bellon L;  
 PI Parry T, Beigelman L, Mcswiggen JA, Karpeisky A, Burgin A;  
 PI Thompson J, Workman CT, Beaudry A, Sweedler D;  
 XX  
 DR WPI; 1999-009494/01.  
 XX  
 PT Identifying new catalytic nucleic acid that modulates selected processes  
 PT - especially ribozymes that cleave Raf RNA for treating cancer,  
 PT restenosis, and also new ribozymes and modified nucleoside triphosphates  
 PT used as antiviral agents and synthons.  
 XX  
 PS Claim 177; Page 170; 259pp; English.  
 XX  
 CC A method has been developed for the identification of a nucleic acid  
 CC capable of modulating a process in a biological system. The method  
 CC comprises: (a) introducing into the system a random library of nucleic  
 CC acid catalysts (NAC) having a substrate binding domain (SBD), comprising

CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC  
 CC in systems where modulation has occurred and/or determining the sequence  
 CC of at least part of the SBDs in such systems. Nucleic acid molecules with  
 CC endonuclease activity and catalytic activity, from the present invention,  
 CC are used to modulate gene expression in plant and mammalian cells and to  
 CC cleave target nucleic acid, particularly for treating systemic diseases  
 CC caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic  
 CC ascites and infection. They may also be used to detect genetic drift and  
 CC mutations in diseased cells and to determine c-raf RNA. Specifically NACs  
 CC with RNA-cleaving activity that modulate expression of the Raf gene, are  
 CC used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or  
 CC generally any condition associated with the level of c-raf. Introduction  
 CC of sugar/phosphate modifications increases stability against nuclease and  
 CC activity. AAV90922 to AAV93877 represent NACs that can be used in the  
 CC method, specifically for modulating the expression of a Raf gene  
 XX  
 SQ Sequence 17 BP; 6 A; 5 C; 2 G; 0 T; 4 U; 0 Other;  
 Query Match 0.7%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 73.3%; Pred. No. 2.3e+02;  
 Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;  
 QY 1082 ATTACTACACGCCA 1096  
 Db |::||:|||||  
 2 AUUACUACACGCCA 16  
 RESULT 377  
 AAV97938  
 ID AAV97938 standard; DNA; 17 BP.  
 XX  
 AC AAV97938;  
 XX  
 DT 15-SEP-2003 (revised)  
 DT 26-APR-2000 (first entry)  
 XX  
 DE HIV-1 protease gene probe SEQ ID NO:428.  
 XX  
 KW Human immunodeficiency virus; HIV; protease; probe; detection;  
 KW drug selected mutation; hybridisation; genotyping; infection;  
 KW drug resistance; ss.  
 XX  
 OS Human immunodeficiency virus 1.  
 XX  
 PN WO9967428-A2.  
 XX  
 PD 29-DEC-1999.  
 XX  
 PF 22-JUN-1999; 99WO-EP004317.  
 XX  
 PR 24-JUN-1998; 98EP-00870143.  
 XX  
 PA (INNO-) INNOGENETICS NV.  
 XX  
 PI Stuyver L;  
 XX  
 DR WPI; 2000-147219/13.  
 XX  
 PT Detection of drug-selected mutations in the HIV protease gene used to  
 PT treat HIV infections.  
 XX  
 PS Claim 3; Page 43; 76pp; English.  
 XX  
 CC The present invention describes the detection of drug-selected mutations  
 CC in the HIV protease gene. The method of detection allows the simultaneous  
 CC characterisation of a range of codons involved in drug resistance using  
 CC sets of probes optimised to function together in a reverse-hybridisation  
 CC assay. AAV97517 to AAV97997 represent specifically claimed probes for use  
 CC in the assay, and AAV97479 to AAV97501 represent specifically claimed HIV  
 CC protease gene polymorphic nucleotide sequences. AAV97502 to AAV97515, and  
 CC AAV98004 to AAV98007, represent PCR primers for the HIV protease gene, the  
 CC and AAV97516 represents an HIV protease probe used in an example from the  
 CC present invention. The method, probes and primers can be used for the

CC detection of drug-selected mutations in the HIV protease gene. The method  
CC allows the simultaneous characterisation of a range of codons involved in  
CC drug resistance. The method may also be used for HIV protease genotyping  
CC assays. The probes are able to discriminate between wild type and mutated  
CC protease sequences. The method allows rapid and reliable detection of  
CC drug-selected mutation in HIV. (Updated on 15-SEP-2003 to standardise OS  
CC field)

XX SQ Sequence 17 BP; 3 A; 2 C; 6 G; 6 T; 0 U; 0 Other;  
Query Match 0.7%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.3e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 640 TGTGACTCAGTTG 654  
DB 1 TGTGACTCAGTTG 15

RESULT 378  
AAF02686/c  
ID AAF02686 standard; DNA; 17 BP.  
XX AC AAF02686;  
XX DT 16-FEB-2001 (first entry)  
XX DE Hammerhead ribozyme substrate #981.  
XX KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
XX KW interferon alpha; ss.  
XX OS Homo sapiens.  
XX PN WO200061729-A2.  
XX PD 19-OCT-2000.  
XX PF 11-APR-2000; 2000WO-US009721.  
XX PR 12-APR-1999; 99US-0129390P.  
XX PA (RIBO-) RIBOZYME PHARM INC.  
XX PI Blatt L, Zwick M, Pavco P, Mcswiggen J;  
XX WPI; 2000-647423/62.  
XX PT Enzymatic and antisense nucleic acid inhibition of repressor genes,  
XX PT useful for producing e.g. granulocyte colony stimulating factor protein,  
XX PT interferon alpha and erythropoietin.  
XX PS Claim 37; Page 78; 164pp; English.  
XX CC The present invention relates to enzymatic and antisense nucleic acid  
XX CC molecules that act as inhibitors of the expression of repressor genes  
XX CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
XX CC factor gene, IRF-2 and/or the C/EBP Displacement protein (CDP).  
XX CC Inhibition of the repressors removes prevents inhibition (and  
XX CC consequently increases expression of) genes involved in the production of  
XX CC erythropoietin, granulocyte colony stimulating factor protein and  
XX CC interferon alpha

XX SQ Sequence 17 BP; 8 A; 1 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 0.7%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.3e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 7 CTTTGCTGCTCTCCA 21  
DB 15 CTTTGCTATCTCCA 1

CC detection of drug-selected mutations in the HIV protease gene. The method  
CC allows the simultaneous characterisation of a range of codons involved in  
CC drug resistance. The method may also be used for HIV protease genotyping  
CC assays. The probes are able to discriminate between wild type and mutated  
CC protease sequences. The method allows rapid and reliable detection of  
CC drug-selected mutation in HIV. (Updated on 15-SEP-2003 to standardise OS  
CC field)

XX SQ Sequence 17 BP; 3 A; 2 C; 6 G; 6 T; 0 U; 0 Other;  
Query Match 0.7%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.3e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 640 TGTGACTCAGTTG 654  
DB 1 TGTGACTCAGTTG 15

RESULT 378  
AAF02686/c  
ID AAF02686 standard; DNA; 17 BP.  
XX AC AAF02686;  
XX DT 16-FEB-2001 (first entry)  
XX DE Hammerhead ribozyme substrate #981.  
XX KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
XX KW interferon alpha; ss.  
XX OS Homo sapiens.  
XX PN WO200061729-A2.  
XX PD 19-OCT-2000.  
XX PF 11-APR-2000; 2000WO-US009721.  
XX PR 12-APR-1999; 99US-0129390P.  
XX PA (RIBO-) RIBOZYME PHARM INC.  
XX PI Blatt L, Zwick M, Pavco P, Mcswiggen J;  
XX WPI; 2000-647423/62.  
XX PT Enzymatic and antisense nucleic acid inhibition of repressor genes,  
XX PT useful for producing e.g. granulocyte colony stimulating factor protein,  
XX PT interferon alpha and erythropoietin.  
XX PS Claim 37; Page 78; 164pp; English.  
XX CC The present invention relates to enzymatic and antisense nucleic acid  
XX CC molecules that act as inhibitors of the expression of repressor genes  
XX CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
XX CC factor gene, IRF-2 and/or the C/EBP Displacement protein (CDP).  
XX CC Inhibition of the repressors removes prevents inhibition (and  
XX CC consequently increases expression of) genes involved in the production of  
XX CC erythropoietin, granulocyte colony stimulating factor protein and  
XX CC interferon alpha

XX SQ Sequence 17 BP; 8 A; 1 C; 6 G; 2 T; 0 U; 0 Other;  
Query Match 0.7%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.3e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 7 CTTTGCTGCTCTCCA 21  
DB 15 CTTTGCTATCTCCA 1

RESULT 379  
AAH95339  
ID AAH95339 standard; RNA; 17 BP.  
XX AC AAH95339;  
XX DT 09-OCT-2001 (first entry)  
XX DE Human Chk1 ribozyme substrate SEQ ID NO: 764.  
XX KW Human; checkpoint kinase-1; Chk1; antisense; ribozyme; gene therapy;  
XX KW RNA cleavage; cancer; ss.  
XX OS Homo sapiens.  
XX PN WO200157206-A2.  
XX PD 09-AUG-2001.  
XX PF 02-FEB-2001; 2001WO-US003504.  
XX PR 03-FEB-2000; 2000US-0179983P.  
XX PA (RIBO-) RIBOZYME PHARM INC.  
XX PA (PATT/) PATTAEY A R.  
XX PI Pattaey AR, Jarvis T, Mcswiggen J, Booher RN, Holman PS;  
XX WPI; 2001-496922/54.  
XX PT Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid  
XX PT molecules, which downregulates expression of a checkpoint kinase-1 gene,  
XX PT useful for treating colorectal, lung, breast or prostate cancers.  
XX PS Claim 4; Page 68; 115pp; English.  
XX CC The present invention provides nucleic acid molecules capable of  
XX CC downregulating the expression of the human checkpoint kinase-1 (Chk1)  
XX CC gene. These may be antisense or ribozyme sequences, and are useful in the  
XX CC treatment of diseases associated with conditions affected by Chk1 levels,  
XX CC including cancer. The present sequence is an oligonucleotide described in  
XX CC the exemplification of the invention

XX SQ Sequence 17 BP; 4 A; 1 C; 5 G; 0 T; 7 U; 0 Other;  
Query Match 0.7%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 53.3%; Pred. No. 2.3e+02;  
Matches 8; Conservative 6; Mismatches 1; Indels 0; Gaps 0;

QY 1959 CTGATTGACATTGTG 1973  
DB 3 CUGAUGAUAUUGUG 17

RESULT 380  
AAH95705  
ID AAH95705 standard; RNA; 17 BP.  
XX AC AAH95705;  
XX DT 09-OCT-2001 (first entry).  
XX DE Human Chk1 ribozyme substrate SEQ ID NO: 1130.  
XX KW Human; checkpoint kinase-1; Chk1; antisense; ribozyme; gene therapy;  
XX KW RNA cleavage; cancer; ss.  
XX OS Homo sapiens.  
XX PN WO200157206-A2.  
XX PD 09-AUG-2001.





muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNzyme; inozyme; G-cleaver; amberzyme; zinczyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
XX WO200159103-A2.  
XX  
XX 16-AUG-2001.  
XX  
XX 09-FEB-2001; 2001WO-US004273.  
XX  
XX 11-FEB-2000; 2000US-0181797P.  
XX  
XX 28-FEB-2000; 2000US-0185516P.  
XX  
XX 06-MAR-2000; 2000US-0187128P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX (BLAT/) BLATT L.  
XX  
XX (MCSW/) MCSWIGGEN J.  
XX  
XX (CHOW/) CHOWRIRA B M.  
XX  
XX Blatt L, Mcswiggen J, Chowrira BM;  
XX  
XX WPI; 2001-607195/69.  
XX  
XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.  
XX  
XX Claim 88; Page 75; 200pp; English.  
XX  
XX The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNzyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or an amberzyme (cleaving RNA with an NGN triplet), a zinczyme (cleaving RNA with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targeting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-targeting nucleic acid is used to cleave RNA of the NOGO gene in the presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO activity of the cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more therapies. In particular, the NOGO-targeting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present sequence is a hammerhead ribozyme of the invention

XX  
XX Sequence 17 BP; 5 A; 2 C; 4 G; 0 T; 6 U; 0 Other;

Query Match 0.7%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.3e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 842 CAGATATACCAACTT 856  
Db 15 CAGATATAGCAACTT 1  
RESULT 385  
ABK00227  
ID ABK00227 standard; RNA; 17 BP.  
XX  
XX AC ABK00227;  
XX  
XX DT 12-MAR-2002 (first entry)  
XX  
XX DE Human NOGO Hammerhead Ribozyme #227.  
XX  
XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nontropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNzyme; inozyme; G-cleaver; amberzyme; zinczyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntington's disease; Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
XX  
XX Homo sapiens.  
OS Synthetic.  
XX  
XX WO200159103-A2.  
XX  
XX PD 16-AUG-2001.  
XX  
XX 09-FEB-2001; 2001WO-US004273.  
XX  
XX 11-FEB-2000; 2000US-0181797P.  
XX  
XX 28-FEB-2000; 2000US-0185516P.  
XX  
XX 06-MAR-2000; 2000US-0187128P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX (BLAT/) BLATT L.  
XX  
XX (MCSW/) MCSWIGGEN J.  
XX  
XX (CHOW/) CHOWRIRA B M.  
XX  
XX Blatt L, Mcswiggen J, Chowrira BM;  
XX  
XX WPI; 2001-607195/69.  
XX  
XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.  
XX  
XX Claim 88; Page 69; 200pp; English.  
XX  
XX The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNzyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or an amberzyme (cleaving RNA with an NGN triplet), a zinczyme (cleaving RNA with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targeting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-targeting nucleic acid is used to cleave RNA of the NOGO gene in the presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO activity of the cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more therapies. In particular, the NOGO-targeting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present sequence is a hammerhead ribozyme of the invention

CC of CD20. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
 CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
 CC cell and treat a patient having a condition associated with the level of  
 CC NOGO. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to  
 CC treat central nervous system (CNS) injury and cerebrovascular accident  
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 CC disease, muscular dystrophy, and/or other neurodegenerative disease  
 CC states which respond to the modulation of NOGO expression. The present  
 CC sequence is a hammerhead ribozyme of the invention  
 XX  
 SQ Sequence 17 BP; 3 A; 3 C; 1 G; 0 T; 10 U; 0 Other;  
 Query Match 0.7%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 33.3%; Pred. No. 2.3e+02;  
 Matches 5; Conservative 9; Mismatches 1; Indels 0; Gaps 0;  
 QY 629 CATTTCCTCGTGCT 643  
 DB 2 CAUUUUCUUUGUU 16  
 RESULT 386  
 ABK01444/c  
 ID ABK01444 standard; RNA; 17 BP.  
 XX AC ABK01444;  
 XX 12-MAR-2002 (first entry)  
 XX Human NOGO Inozyme #714.  
 XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNazyme; inozyme; G-cleaver; amberszyme; zinzyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
 XX Homo sapiens.  
 OS Synthetic.  
 OS WO200159103-A2.  
 XX 16-AUG-2001.  
 XX 09-FEB-2001; 2001WO-US0004273.  
 XX 11-FEB-2000; 2000US-0181797P.  
 PR 28-FEB-2000; 2000US-0185516P.  
 PR 06-MAR-2000; 2000US-0187128P.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (CHOW/) CHOWRIRA B M.  
 XX

PI Blatt L, Mcswiggen J, Chowrira BM;  
 XX WPI; 2001-607195/69.  
 XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
 PT constructs, which down regulate expression of a CD20 gene or neurite  
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
 XX central nervous system injury.  
 XX Claim 88; Page 89; 200pp; English.  
 XX The invention relates to a nucleic acid molecule which down regulates  
 CC expression of a CD20 gene and a nucleic acid molecule which down  
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
 CC DNazyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule  
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
 CC an amberszyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
 CC with a IGY motif). The CD20-targeting nucleic acid is used to cleave RNA  
 CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
 CC the cell and treat a patient having a condition associated with the level  
 CC of CD20. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
 CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
 CC cell and treat a patient having a condition associated with the level of  
 CC NOGO. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to  
 CC treat central nervous system (CNS) injury and cerebrovascular accident  
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 CC disease, muscular dystrophy, and/or other neurodegenerative disease  
 CC states which respond to the modulation of NOGO expression. The present  
 CC sequence is an inozyme of the invention  
 XX  
 SQ Sequence 17 BP; 5 A; 2 C; 4 G; 0 T; 6 U; 0 Other;  
 Query Match 0.7%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 2.3e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 842 CAGATATACCAACTT 856  
 DB 16 CAGATATACCAACTT 2  
 RESULT 387  
 ABK01099  
 ID ABK01099 standard; RNA; 17 BP.  
 XX AC ABK01099;  
 XX 12-MAR-2002 (first entry)  
 XX Human NOGO Inozyme #369.  
 XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNazyme; inozyme; G-cleaver; amberszyme; zinzyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;

KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX WO200159103-A2.  
 XX PD 16-AUG-2001.  
 XX PF 09-FEB-2001; 2001WO-US004273.  
 XX PR 11-FEB-2000; 2000US-0181797P.  
 XX PR 28-FEB-2000; 2000US-0185516P.  
 XX PR 06-MAR-2000; 2000US-0187128P.  
 XX PA (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (CHOW/) CHOWRIRA B M.  
 XX PI Blatt L, Mcswiggen J, Chowrira BM;  
 XX WPI; 2001-607195/69.  
 DR Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
 XX constructs, which down regulate expression of a CD20 gene or neurite  
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
 PT central nervous system injury.  
 XX  
 PS Claim 88; Page 83; 200pp; English.  
 XX  
 CC The invention relates to a nucleic acid molecule which down regulates  
 CC expression of a CD20 gene and a nucleic acid molecule which down  
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
 CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a RNA molecule  
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
 CC an amberzyme (cleaving RNA with an NGN triplet), a zynzyme (cleaving RNA  
 CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA  
 CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
 CC the cell and treat a patient having a condition associated with the level  
 CC of CD20. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
 CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
 CC cell and treat a patient having a condition associated with the level of  
 CC NOGO. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the NOGO-targetting nucleic acid may be used to  
 CC treat central nervous system (CNS) injury and cerebrovascular accident  
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 CC disease, muscular dystrophy, and/or other neurodegenerative disease  
 CC states which respond to the modulation of NOGO expression. The present  
 CC sequence is an inozyme of the invention  
 XX  
 SQ Sequence 17 BP; 2 A; 3 C; 2 G; 0 T; 10 U; 0 Other;  
 Query Match 0.7%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 33.3%; Pred. No. 2.3e+02;  
 Matches 5; Conservative 9; Mismatches 1; Indels 0; Gaps 0;  
 ||:||||:|:|:|

QY 629 CATTTTCTGTGT 643

Db 1 CAUUUUUCCUUUGU 15  
 RESULT 388  
 ABK01428/c  
 ID ABK01428 standard; RNA; 17 BP.  
 XX AC ABK01428;  
 XX DT 12-MAR-2002 (first entry)  
 XX DE Human NOGO Inozyme #698.  
 XX KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNAzyme; inozyme; G-cleaver; amberzyme; zynzyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
 XX Homo sapiens. OS  
 OS Synthetic.  
 XX WO200159103-A2.  
 XX PD 16-AUG-2001.  
 XX PF 09-FEB-2001; 2001WO-US004273.  
 XX PR 11-FEB-2000; 2000US-0181797P.  
 XX PR 28-FEB-2000; 2000US-0185516P.  
 XX PR 06-MAR-2000; 2000US-0187128P.  
 XX PA (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (CHOW/) CHOWRIRA B M.  
 XX PI Blatt L, Mcswiggen J, Chowrira BM;  
 XX WPI; 2001-607195/69.  
 DR Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
 XX constructs, which down regulate expression of a CD20 gene or neurite  
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
 PT central nervous system injury.  
 XX  
 PS Claim 88; Page 89; 200pp; English.  
 XX  
 CC The invention relates to a nucleic acid molecule which down regulates  
 CC expression of a CD20 gene and a nucleic acid molecule which down  
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
 CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a RNA molecule  
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
 CC an amberzyme (cleaving RNA with an NGN triplet), a zynzyme (cleaving RNA  
 CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA  
 CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
 CC the cell and treat a patient having a condition associated with the level  
 CC of CD20. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the  
 CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
 CC cell and treat a patient having a condition associated with the level of  
 CC NOGO. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the NOGO-targetting nucleic acid may be used to  
 CC treat central nervous system (CNS) injury and cerebrovascular accident  
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 CC disease, muscular dystrophy, and/or other neurodegenerative disease  
 CC states which respond to the modulation of NOGO expression. The present  
 CC sequence is an inozyme of the invention



CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the  
 CC presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the  
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the  
 CC cell and treat a patient having a condition associated with the level of  
 CC NOGO. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the NOGO-targetting nucleic acid may be used to  
 CC treat central nervous system (CNS) injury and cerebrovascular accident  
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),  
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),  
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob  
 CC disease, muscular dystrophy, and/or other neurodegenerative disease  
 CC states which respond to the modulation of NOGO expression. The present  
 CC sequence is an inozyme of the invention  
 XX  
 SQ Sequence 17 BP; 5 A; 1 C; 7 G; 0 T; 4 U; 0 Other;  
 Query Match 0.7%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 2.3e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 101 ACACCCCTGTATATC 115  
 Db 16 ACACCCCTGTATATC 2  
 RESULT 389  
 ABN10109/c  
 ID ABN10109 standard; DNA; 17 BP.  
 AC ABN10109;  
 XX  
 XX 29-MAY-2002 (first entry)  
 XX  
 DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10101.  
 XX  
 XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
 KW skeletal muscle disorder; amplicon; screening; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200192524-A2.  
 XX  
 PD 06-DEC-2001.  
 XX  
 XX 25-MAY-2001; 2001WO-US016981.  
 XX  
 PR 26-MAY-2000; 2000US-0207456P.  
 PR 21-SEP-2000; 2000US-0234687P.  
 PR 27-SEP-2000; 2000US-0236359P.  
 PR 04-OCT-2000; 2000GB-00024263.  
 PR 30-JAN-2001; 2001WO-US000661.  
 PR 30-JAN-2001; 2001WO-US000662.  
 PR 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 PR 30-JAN-2001; 2001WO-US000666.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 30-JAN-2001; 2001WO-US000669.  
 PR 05-FEB-2001; 2001US-0266860P.  
 XX  
 XX (ABOM-) ABOMICA INC.  
 XX  
 PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;  
 XX  
 XX WPI; 2002-179446/23.  
 XX  
 XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,  
 PT or as specific biomolecule capture probes for surface-enhanced laser  
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.  
 XX

PS Disclosure; SEQ ID NO 10101; 214pp; English.  
 XX  
 CC The present invention describes a human genome-derived myosin-like  
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-  
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1  
 CC nucleic acids can be used as probes to detect, characterise and quantify  
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to  
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1  
 CC protein variants having desired phenotypic improvements, and for  
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be  
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP  
 CC -1 proteins, as standards in assays used to determine the concentration  
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule  
 CC capture probes for surface-enhanced laser desorption ionisation, as  
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1  
 CC production, and in vaccines or for replacement therapy. The  
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a  
 CC disorder associated with the expression of hGDMPLP-1, in particular heart  
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.  
 CC The present sequence represents an oligomer used in the screening of the  
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.  
 CC The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/published\_pct\_sequence  
 XX  
 SQ Sequence 17 BP; 3 A; 5 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 2.3e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 360 CCATGAGGTGGGCAA 374  
 Db 15 CCATGAGGTGGGCAA 1  
 RESULT 390  
 ABN10107/c  
 ID ABN10107 standard; DNA; 17 BP.  
 AC ABN10107;  
 XX  
 XX 29-MAY-2002 (first entry)  
 XX  
 DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10099.  
 XX  
 KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;  
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;  
 KW skeletal muscle disorder; amplicon; screening; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200192524-A2.  
 XX  
 PD 06-DEC-2001.  
 XX  
 XX 25-MAY-2001; 2001WO-US016981.  
 XX  
 PR 26-MAY-2000; 2000US-0207456P.  
 PR 21-SEP-2000; 2000US-0234687P.  
 PR 27-SEP-2000; 2000US-0236359P.  
 PR 04-OCT-2000; 2000GB-00024263.  
 PR 30-JAN-2001; 2001WO-US000661.  
 PR 30-JAN-2001; 2001WO-US000662.  
 PR 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 PR 30-JAN-2001; 2001WO-US000666.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 30-JAN-2001; 2001WO-US000669.  
 PR 05-FEB-2001; 2001US-0266860P.  
 PR

```
XX (AEOM-) AEOMICA INC.
XX
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
XX WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
XX or as specific biomolecule capture probes for surface-enhanced laser
XX desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 10099; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
XX protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
XX 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
XX nucleic acids can be used as probes to detect, characterise and quantify
XX hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
XX provide initial substrates for the recombinant engineering of hGDMPLP-1
XX protein variants having desired phenotypic improvements, and for
XX expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
XX used as immunogens to raise antibodies that specifically recognise hGDMPLP
XX -1 proteins, as standards in assays used to determine the concentration
XX and/or amount specifically of hGDMPLP proteins, as specific biomolecule
XX capture probes for surface-enhanced laser desorption/ionisation, as
XX therapeutic supplement in patients having specific deficiency in hGDMPLP-1
XX production, and in vaccines or for replacement therapy. The
XX polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
XX disorder associated with the expression of hGDMPLP-1, in particular heart
XX and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
XX The present sequence represents an oligomer used in the screening of the
XX hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
XX The sequence data for this patent did not form part of the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequence
XX
XX Sequence 17 BP; 2 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 13.4; DB 1; Length 17;
XX Best Local Similarity 93.3%; Pred. No. 2.3e+02;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 360 CCATCAGGTGGGCAA 374
XX Db ||||| ||||| |||||
XX 17 CCATCAGGTGGGCAA 3
XX
XX RESULT 391
XX ABN10108/c
XX ID ABN10108 standard; DNA; 17 BP.
XX
XX AC ABN10108;
XX
XX XX 29-MAY-2002 (first entry)
XX
XX XX Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10100.
XX
XX DE Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
XX KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
XX KW skeletal muscle disorder; amplicon; screening; ss.
XX
XX OS Homo sapiens.
XX
XX XX WO200192524-A2.
XX
XX XX 06-DEC-2001.
XX
XX XX 25-MAY-2001; 2001WO-US016981.
XX
XX XX 26-MAY-2000; 2000US-0207456P.
XX PR 21-SEP-2000; 2000US-0234687P.
XX PR 27-SEP-2000; 2000US-0236359P.
XX PR 04-OCT-2000; 2000GB-00024263.
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PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0268660P.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
XX WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
XX or as specific biomolecule capture probes for surface-enhanced laser
XX desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 10100; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
XX protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
XX 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
XX nucleic acids can be used as probes to detect, characterise and quantify
XX hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
XX provide initial substrates for the recombinant engineering of hGDMPLP-1
XX protein variants having desired phenotypic improvements, and for
XX expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
XX used as immunogens to raise antibodies that specifically recognise hGDMPLP
XX -1 proteins, as standards in assays used to determine the concentration
XX and/or amount specifically of hGDMPLP proteins, as specific biomolecule
XX capture probes for surface-enhanced laser desorption/ionisation, as
XX therapeutic supplement in patients having specific deficiency in hGDMPLP-1
XX production, and in vaccines or for replacement therapy. The
XX polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
XX disorder associated with the expression of hGDMPLP-1, in particular heart
XX and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
XX The present sequence represents an oligomer used in the screening of the
XX hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
XX The sequence data for this patent did not form part of the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequence
XX
XX Sequence 17 BP; 3 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 13.4; DB 1; Length 17;
XX Best Local Similarity 93.3%; Pred. No. 2.3e+02;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 360 CCATCAGGTGGGCAA 374
XX Db ||||| ||||| |||||
XX 16 CCATCAGGTGGGCAA 2
XX
XX RESULT 392
XX ABK18560
XX ID ABK18560 standard; RNA; 17 BP.
XX
XX AC ABK18560;
XX
XX XX 09-APR-2002 (first entry)
XX
XX XX Human ERG G-cleaver ribozyme target sequence Seq ID No 1207.
XX DE Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
XX KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
XX KW vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
XX KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
XX KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
```

KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;  
 KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
 KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;  
 KW amberzyme.  
 XX Homo sapiens.  
 OS  
 XX WO200188124-A2.  
 PN  
 XX 22-NOV-2001.  
 PD  
 XX  
 XX 16-MAY-2001; 2001WO-US015866.  
 PF  
 XX  
 XX 16-MAY-2000; 2000US-00572021.  
 PR  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA  
 XX (GLAX ) GLAXO GROUP LTD.  
 PA  
 XX  
 XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
 PI  
 XX WPI; 2002-082995/11.  
 DR  
 XX  
 XX Novel polynucleotide which down regulates expression of Ets-related gene,  
 PT useful for treating cancer, diabetic retinopathy, macular degeneration,  
 PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
 PT  
 XX  
 XX Claim 4; Page 81; 149pp; English.  
 PS  
 XX  
 XX The invention relates to a nucleic acid molecule (I) which down regulates  
 CC expression of an Ets-related gene (ERG). (I) is useful for treating  
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,  
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
 CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge  
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
 CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
 CC treating a patient having a condition associated with the level of ERG,  
 CC by contacting cells of the patient with (I) under conditions suitable for  
 CC the treatment. The method comprises the use of one or more therapies  
 CC under conditions suitable for the treatment. Leukaemia or tumour  
 CC angiogenesis is treated by administering (I) to the patient in  
 CC conjunction with one or more of other therapies such as radiation or  
 CC chemotherapy treatment. (I) is useful for reducing ERG activity in a  
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
 CC cation such as Mg2+. (I) is useful for diagnosis of conditions and  
 CC diseases related to the expression of ERG, and as diagnostic tool to  
 CC examine genetic drift and mutations within diseased cells or to detect  
 CC the presence of ERG RNA in a cell. (I) is useful for specifically  
 CC targeting genes that share homology with ERG gene or ERG fusion genes.  
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
 CC related PCR primers of the invention  
 XX  
 XX Sequence 17 BP; 3 A; 4 C; 7 G; 0 T; 3 U; 0 Other;  
 SQ  
 Query Match 0.7%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 80.0%; Pred. No. 2.3e+02;  
 Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;  
 QY 323 GACCATGTGGCGTGTG 337  
 |||||:|||||  
 Db 1 GACCAUGUGCGGCAG 15  
 RESULT 393  
 ABK18559  
 ID ABK18559 standard; RNA; 17 BP.  
 XX  
 XX ABK18559;  
 AC  
 XX  
 XX 09-APR-2002 (first entry)  
 DT  
 XX

DE Human ERG G-cleaver ribozyme target sequence Seq ID No 1206.  
 XX  
 XX Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
 KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
 KW vulnery; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
 KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
 KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
 KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;  
 KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
 KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;  
 KW amberzyme.  
 XX  
 XX Homo sapiens.  
 OS  
 XX WO200188124-A2.  
 PN  
 XX 22-NOV-2001.  
 PD  
 XX  
 XX 16-MAY-2001; 2001WO-US015866.  
 PF  
 XX  
 XX 16-MAY-2000; 2000US-00572021.  
 PR  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA  
 XX (GLAX ) GLAXO GROUP LTD.  
 PA  
 XX  
 XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
 PI  
 XX WPI; 2002-082995/11.  
 DR  
 XX  
 XX Novel polynucleotide which down regulates expression of Ets-related gene,  
 PT useful for treating cancer, diabetic retinopathy, macular degeneration,  
 PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
 PT  
 XX  
 XX Claim 4; Page 81; 149pp; English.  
 PS  
 XX  
 XX The invention relates to a nucleic acid molecule (I) which down regulates  
 CC expression of an Ets-related gene (ERG). (I) is useful for treating  
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,  
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
 CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge  
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
 CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
 CC treating a patient having a condition associated with the level of ERG,  
 CC by contacting cells of the patient with (I) under conditions suitable for  
 CC the treatment. The method comprises the use of one or more therapies  
 CC under conditions suitable for the treatment. Leukaemia or tumour  
 CC angiogenesis is treated by administering (I) to the patient in  
 CC conjunction with one or more of other therapies such as radiation or  
 CC chemotherapy treatment. (I) is useful for reducing ERG activity in a  
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
 CC cation such as Mg2+. (I) is useful for diagnosis of conditions and  
 CC diseases related to the expression of ERG, and as diagnostic tool to  
 CC examine genetic drift and mutations within diseased cells or to detect  
 CC the presence of ERG RNA in a cell. (I) is useful for specifically  
 CC targeting genes that share homology with ERG gene or ERG fusion genes.  
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
 CC related PCR primers of the invention  
 XX  
 XX Sequence 17 BP; 4 A; 5 C; 6 G; 0 T; 2 U; 0 Other;  
 SQ  
 Query Match 0.7%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 80.0%; Pred. No. 2.3e+02;  
 Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;  
 QY 323 GACCATGTGGCGTGTG 337  
 |||||:|||||  
 Db 3 GACCAUGUGCGGCAG 17  
 RESULT 394





XX Shannon M;  
 PI WPI; 2002-684061/74.  
 DR Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL  
 XX -1, useful for treating disorders associated with decreased expression or  
 PT activity of human POSHL1.  
 PT  
 XX Example 2; SEQ ID NO 317; 60pp + Sequence Listing; English.  
 XX The invention relates to an isolated SH3 domain (POSH)-like signalling  
 CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino  
 CC acids (S1, AB883999), a sequence having 65% sequence identity to (S1),  
 CC (S1) having 95% deviations, especially conservative substitutions or a  
 CC fragment of the sequences comprising at least 8 contiguous amino acids.  
 CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an  
 CC adaptor protein that interacts with Rho family small GTPases as well as  
 CC downstream components of the signal transduction pathway. (I) is useful  
 CC for identifying a specific binding partner. (I) and nucleic acids (II)  
 CC encoding (I) are useful for diagnosing, monitoring disease and treating  
 CC caused by altered expression of human POSHL1 including diagnosing and  
 CC treating cancer, they useful in the development of vaccines and (II) is  
 CC useful in gene therapy. (II) is useful for constructing microarrays which  
 CC are useful for measuring and for surveying gene expression and creating  
 CC transgenic non-human animals capable of producing the proteins. The  
 CC present sequence is that of a scanning oligonucleotide useful in examples  
 CC of the invention. Note: The present sequence did not form part of the  
 CC printed specification, but is based on sequence information supplied to  
 CC Derwent by the European Patent Office  
 XX Sequence 17 BP; 6 A; 4 C; 4 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 0.7%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 2.3e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 118 TGTCCAGCGCAATGT 132  
 DB 3 TGTCCAGCGCAAGT 17  
 RESULT 399  
 ABV89606  
 ID ABV89606 standard; DNA; 17 BP.  
 XX AC ABV89606;  
 XX DT 23-DEC-2002 (first entry)  
 XX DE Human POSHL1 scanning oligonucleotide SEQ ID NO 319.  
 XX KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;  
 KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;  
 KW gene therapy; transgenic; ss.  
 XX OS Homo sapiens.  
 XX XN EP1239051-A2.  
 XX PD 11-SEP-2002.  
 XX PF 28-JAN-2002; 2002EP-00001165.  
 XX PR 30-JAN-2001; 2001WO-US000663.  
 PR 30-JAN-2001; 2001WO-US000664.  
 PR 30-JAN-2001; 2001WO-US000665.  
 PR 30-JAN-2001; 2001WO-US000666.  
 PR 30-JAN-2001; 2001WO-US000667.  
 PR 30-JAN-2001; 2001WO-US000668.  
 PR 30-JAN-2001; 2001WO-US000669.  
 PR 30-JAN-2001; 2001WO-US000670.  
 PR 23-MAY-2001; 2001US-00864761.

PR 10-OCT-2001; 2001US-0328205P.  
 XX (AEOM-) AEOMICA INC.  
 XX PI Shannon M;  
 DR WPI; 2002-684061/74.  
 XX Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL  
 PT -1, useful for treating disorders associated with decreased expression or  
 PT activity of human POSHL1.  
 XX Example 2; SEQ ID NO 319; 60pp + Sequence Listing; English.  
 XX The invention relates to an isolated SH3 domain (POSH)-like signalling  
 CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino  
 CC acids (S1, AB883999), a sequence having 65% sequence identity to (S1),  
 CC (S1) having 95% deviations, especially conservative substitutions or a  
 CC fragment of the sequences comprising at least 8 contiguous amino acids.  
 CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an  
 CC adaptor protein that interacts with Rho family small GTPases as well as  
 CC downstream components of the signal transduction pathway. (I) is useful  
 CC for identifying a specific binding partner. (I) and nucleic acids (II)  
 CC encoding (I) are useful for diagnosing, monitoring disease and treating  
 CC caused by altered expression of human POSHL1 including diagnosing and  
 CC treating cancer, they useful in the development of vaccines and (II) is  
 CC useful in gene therapy. (II) is useful for constructing microarrays which  
 CC are useful for measuring and for surveying gene expression and creating  
 CC transgenic non-human animals capable of producing the proteins. The  
 CC present sequence is that of a scanning oligonucleotide useful in examples  
 CC of the invention. Note: The present sequence did not form part of the  
 CC printed specification, but is based on sequence information supplied to  
 CC Derwent by the European Patent Office  
 XX Sequence 17 BP; 5 A; 6 C; 3 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 0.7%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 2.3e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 118 TGTCCAGCGCAATGT 132  
 DB 1 TGTCCAGCGCAAGT 15  
 RESULT 400  
 ACN09264  
 ID ACN09264 standard; RNA; 17 BP.  
 XX AC ACN09264;  
 XX DT 22-APR-2004 (first entry)  
 XX DE WNV minus strand Hammerhead Ribozyme substrate SEQ ID NO 9267.  
 XX KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
 KW virucide; neuroprotective; antibacterial; replication; pancreatitis;  
 KW encephalitis; myocarditis; meningitis; infection; hepatitis;  
 KW liver failure; cancer; cirrhosis; Hammerhead; inozyme; DNazyme;  
 KW Amberzyme; Zinzyme; ss.  
 XX OS West Nile Virus.  
 XX PN WO200268637-A2.  
 XX PD 06-SEP-2002.  
 XX PF 19-OCT-2001; 2001WO-US048350.  
 XX PR 20-OCT-2000; 2000US-024241P.  
 XX PA (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.

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PA (MCSW/) MCSWIGGEN J A.
XX
PI Blatt L, Mcswiggen JA;
XX
XX WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 9267; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
XX Sequence 17 BP; 2 A; 10 C; 2 G; 0 T; 3 U; 0 Other;
SQ Query Match 0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 2.3e+02;
Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1343 GCCCTGCCCCACCAC 1357
DB 1 GCCCTGCCCCACCAC 15

RESULT 401
ACN06554/c
ID ACN06554 standard; RNA; 17 BP.
XX
XX ACN06554;
XX
XX 22-APR-2004 (first entry)
DT
DE WNV Amberzyme substrate SEQ ID NO 6557.
XX
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
KW Amberzyme; Zinzyme; ss.
XX
XX West Nile Virus.
OS
XX
XX WO200268637-A2.
PN
XX
XX 06-SEP-2002.
PD
XX
XX 19-OCT-2001; 2001WO-US048350.
PF
XX
XX 20-OCT-2000; 2000US-0242411P.
PR
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
PI
XX
XX WPI; 2002-706994/76.
DR
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 9267; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
XX Sequence 17 BP; 2 A; 10 C; 2 G; 0 T; 3 U; 0 Other;
SQ Query Match 0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 2.3e+02;
Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1752 CTGTCGTCATCCAG 1766
DB 16 CTGTCGTCATCCAG 2

RESULT 402
ACN10683
ID ACN10683 standard; RNA; 17 BP.
XX
XX ACN10683;
XX
XX 22-APR-2004 (first entry)
DT
DE WNV minus strand Inozyme substrate SEQ ID NO 10686.
XX
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
KW Amberzyme; Zinzyme; ss.
XX
XX West Nile Virus.
OS
XX
XX WO200268637-A2.
PN
XX
XX 06-SEP-2002.
PD
XX
XX 19-OCT-2001; 2001WO-US048350.
PF
XX
XX 20-OCT-2000; 2000US-0242411P.
PR
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
PI
XX
XX WPI; 2002-706994/76.
DR
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 10686; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
```

CC treating a condition related to WNV infection e.g. pancreatitis,  
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,  
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid  
CC molecule is selected from the group of ribozymes consisting of  
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The  
CC nucleic acid molecules further comprise at least five ribose residues, at  
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
CC least three of the 5' terminal nucleotides and a 3' end modification of a  
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
CC in the specification. The present sequence is that of a nucleic acid  
CC molecule of the invention

XX Sequence 17 BP; 3 A; 6 C; 5 G; 0 T; 3 U; 0 Other;  
SQ

Query Match 0.7%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 73.3%; Pred. No. 2.3e+02;  
Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1752 CTGTGTCATCAATCAG 1766  
Db 1 CUGGGGCUCAUCCAG 15

RESULT 403  
ID ACN04807/c  
XX ACN04807 standard; RNA; 17 BP.  
AC ACN04807;  
XX  
XX  
DT 22-APR-2004 (first entry)  
DE WNV DNazyme substrate SEQ ID NO 4810.  
XX  
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;  
KW encephalitis; myocarditis; meningitis; infection; hepatitis;  
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;  
KW Amberzyme; Zinzyme; ss.  
XX  
XX West Nile Virus.  
OS  
XX  
XX WO200268637-A2.  
PN  
XX  
PD 06-SEP-2002.  
XX  
XX 19-OCT-2001; 2001WO-US048350.  
PF  
XX  
PR 20-OCT-2000; 2000US-0242411P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J A.  
XX  
XX Blatt L, Mcswiggen JA;  
PI  
XX  
XX WPI; 2002-706994/76.  
DR  
XX  
XX New nucleic acid molecule that modulates replication of West Nile Virus  
PT (WNV), useful for treating a condition related to WNV infection e.g.  
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.  
XX  
XX Claim 23; SEQ ID NO 4810; 495pp; English.  
PS  
XX  
XX The invention relates to nucleic acid molecules that modulate replication  
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for  
CC treating a condition related to WNV infection e.g. pancreatitis,  
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,  
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid  
CC molecule is selected from the group of ribozymes consisting of  
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The  
CC nucleic acid molecules further comprise at least five ribose residues, at  
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
CC least three of the 5' terminal nucleotides and a 3' end modification of a  
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
CC in the specification. The present sequence is that of a nucleic acid  
CC molecule of the invention

CC least three of the 5' terminal nucleotides and a 3' end modification of a  
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
CC in the specification. The present sequence is that of a nucleic acid  
CC molecule of the invention

XX Sequence 17 BP; 3 A; 2 C; 9 G; 0 T; 3 U; 0 Other;  
SQ

Query Match 0.7%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.3e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1343 GCCCCTGCCACCAC 1357  
Db 16 GCCCCTGCCACCAC 2

RESULT 404  
ID ACN05659/c  
XX ACN05659 standard; RNA; 17 BP.  
AC ACN05659;  
XX  
XX  
DT 22-APR-2004 (first entry)  
DE WNV Amberzyme substrate SEQ ID NO 5662.  
XX  
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;  
KW encephalitis; myocarditis; meningitis; infection; hepatitis;  
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;  
KW Amberzyme; Zinzyme; ss.  
XX  
XX West Nile Virus.  
OS  
XX  
XX WO200268637-A2.  
PN  
XX  
PD 06-SEP-2002.  
XX  
XX 19-OCT-2001; 2001WO-US048350.  
PF  
XX  
PR 20-OCT-2000; 2000US-0242411P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J A.  
XX  
XX Blatt L, Mcswiggen JA;  
PI  
XX  
XX WPI; 2002-706994/76.  
DR  
XX  
XX New nucleic acid molecule that modulates replication of West Nile Virus  
PT (WNV), useful for treating a condition related to WNV infection e.g.  
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.  
XX  
XX Claim 23; SEQ ID NO 5662; 495pp; English.  
PS  
XX  
XX The invention relates to nucleic acid molecules that modulate replication  
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for  
CC treating a condition related to WNV infection e.g. pancreatitis,  
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,  
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid  
CC molecule is selected from the group of ribozymes consisting of  
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The  
CC nucleic acid molecules further comprise at least five ribose residues, at  
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
CC least three of the 5' terminal nucleotides and a 3' end modification of a  
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
CC in the specification. The present sequence is that of a nucleic acid  
CC molecule of the invention

XX Sequence 17 BP; 3 A; 2 C; 10 G; 0 T; 2 U; 0 Other;  
SQ



```
Query Match      0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1343 GCCCTGCCACAC 1357
DB 17 GCCCTGTCCACCAC 3

RESULT 405
ACN00847/c
ID ACN00847 standard; RNA; 17 BP.
XX AC ACN00847;
XX DT 22-APR-2004 (first entry)
XX DE WNV Hammerhead Ribozyme substrate SEQ ID NO 837.
XX KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
KW Amberzyme; Zinzyme; ss.
XX OS West Nile Virus.
XX PN WO200268637-A2.
XX PD 06-SEP-2002.
XX PF 19-OCT-2001; 2001WO-US048350.
XX PR 20-OCT-2000; 2000US-0242411P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (BLAT/) BLATT L.
XX PA (MCSW/) MCSWIGGEN J A.
XX PI Blatt L, Mcswiggen JA;
XX WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
XX (WNV), useful for treating a condition related to WNV infection e.g.
XX pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 837; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
XX of the West Nile Virus (WNV). The nucleic acid molecules are useful for
XX treating a condition related to WNV infection e.g. pancreatitis,
XX encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
XX liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
XX molecule is selected from the group of ribozymes consisting of
XX Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
XX nucleic acid molecules further comprise at least five ribose residues, at
XX least ten 2'-O-methyl modifications, phosphorothioate linkages on at
XX least three of the 5' terminal nucleotides and a 3' end modification of a
XX 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
XX are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
XX in the specification. The present sequence is that of a nucleic acid
XX molecule of the invention
XX
XX Sequence 17 BP; 3 A; 5 C; 6 G; 0 T; 3 U; 0 Other;

Query Match      0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1752 CTGCGTCAATCCAG 1766
DB 1752 CTGCGTCAATCCAG 1766
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Db 17 CTGCGTCAATCCAG 3

RESULT 406
ACN10440
ID ACN10440 standard; RNA; 17 BP.
XX AC ACN10440;
XX DT 22-APR-2004 (first entry)
XX DE WNV minus strand Inozyme substrate SEQ ID NO 10443.
XX KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
KW Amberzyme; Zinzyme; ss.
XX OS West Nile Virus.
XX PN WO200268637-A2.
XX PD 06-SEP-2002.
XX PF 19-OCT-2001; 2001WO-US048350.
XX PR 20-OCT-2000; 2000US-0242411P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (BLAT/) BLATT L.
XX PA (MCSW/) MCSWIGGEN J A.
XX PI Blatt L, Mcswiggen JA;
XX WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
XX (WNV), useful for treating a condition related to WNV infection e.g.
XX pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 10443; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
XX of the West Nile Virus (WNV). The nucleic acid molecules are useful for
XX treating a condition related to WNV infection e.g. pancreatitis,
XX encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
XX liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
XX molecule is selected from the group of ribozymes consisting of
XX Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
XX nucleic acid molecules further comprise at least five ribose residues, at
XX least ten 2'-O-methyl modifications, phosphorothioate linkages on at
XX least three of the 5' terminal nucleotides and a 3' end modification of a
XX 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
XX are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
XX in the specification. The present sequence is that of a nucleic acid
XX molecule of the invention
XX
XX Sequence 17 BP; 3 A; 5 C; 2 G; 0 T; 7 U; 0 Other;

Query Match      0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 53.3%; Pred. No. 2.3e+02;
Matches 8; Conservative 6; Mismatches 1; Indels 0; Gaps 0;

QY 851 CAACCTTCTCTGGA 865
DB 1 CAACUUCUUCUGCA 15

RESULT 407
ACN05173/c
ID ACN05173 standard; RNA; 17 BP.
XX
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AC ACN05173;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV DNAzyme substrate SEQ ID NO 5176.
XX
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
XX encephalitis; myocarditis; meningitis; infection; hepatitis;
XX liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
XX Amberzyme; Zinzyme; ss.
XX
XX West Nile Virus.
XX
XX WO200268637-A2.
XX
XX 06-SEP-2002.
XX
XX 19-OCT-2001; 2001WO-US048350.
XX
XX 20-OCT-2000; 2000US-0242411P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (BLAT/) BLATT L.
XX (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
XX
XX WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
XX (WNV), useful for treating a condition related to WNV infection e.g.
XX pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 5176; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
XX of the West Nile Virus (WNV). The nucleic acid molecules are useful for
XX treating a condition related to WNV infection e.g. pancreatitis,
XX encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
XX liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
XX molecule is selected from the group of ribozymes consisting of
XX Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
XX nucleic acid molecules further comprise at least five ribose residues, at
XX least ten 2'-O-methyl modifications, phosphorothioate linkages on at
XX least three of the 5' terminal nucleotides and a 3' end modification of a
XX 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
XX are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
XX in the specification. The present sequence is that of a nucleic acid
XX molecule of the invention
XX
XX Sequence 17 BP; 3 A; 4 C; 7 G; 0 T; 3 U; 0 Other;
XX
XX Query Match 0.7%; Score 13.4; DB 1; Length 17;
XX Best Local Similarity 93.3%; Pred. No. 2.3e+02;
XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 1752 CTGTGTCATTCAG 1766
XX
XX 15 CTGGGTCATTCAG 1
XX
XX
XX RESULT 408
XX ACN13461
XX ID ACN13461 standard; RNA; 17 BP.
XX
XX ACN13461;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV minus strand Zinzyme substrate SEQ ID NO 13464.
XX
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW

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KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
KW Amberzyme; Zinzyme; ss.
XX
XX West Nile Virus.
XX
XX WO200268637-A2.
XX
XX 06-SEP-2002.
XX
XX 19-OCT-2001; 2001WO-US048350.
XX
XX 20-OCT-2000; 2000US-0242411P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX (BLAT/) BLATT L.
XX (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
XX
XX WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
XX (WNV), useful for treating a condition related to WNV infection e.g.
XX pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 13464; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
XX of the West Nile Virus (WNV). The nucleic acid molecules are useful for
XX treating a condition related to WNV infection e.g. pancreatitis,
XX encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
XX liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
XX molecule is selected from the group of ribozymes consisting of
XX Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
XX nucleic acid molecules further comprise at least five ribose residues, at
XX least ten 2'-O-methyl modifications, phosphorothioate linkages on at
XX least three of the 5' terminal nucleotides and a 3' end modification of a
XX 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
XX are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
XX in the specification. The present sequence is that of a nucleic acid
XX molecule of the invention
XX
XX Sequence 17 BP; 3 A; 10 C; 2 G; 0 T; 2 U; 0 Other;
XX
XX Query Match 0.7%; Score 13.4; DB 1; Length 17;
XX Best Local Similarity 86.7%; Pred. No. 2.3e+02;
XX Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
XX
XX 1343 GCCCCTGCCACCAC 1357
XX
XX 3 GCCCCUGUCCACCAC 17
XX
XX
XX RESULT 409
XX ACN08287
XX ID ACN08287 standard; RNA; 17 BP.
XX
XX ACN08287;
XX
XX 22-APR-2004 (first entry)
XX
XX WNV minus strand Hammerhead Ribozyme substrate SEQ ID NO 8290.
XX
XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
KW Amberzyme; Zinzyme; ss.
XX
XX West Nile Virus.
XX

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PN WO200268637-A2.
XX
XX
PD
XX
XX
PF 19-OCT-2001; 2001WO-US048350.
XX
XX 20-OCT-2000; 2000US-0242411P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
XX Blatt L, Mcswiggen JA;
PI
XX WPI; 2002-706994/76.
XX
XX New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
XX Claim 23; SEQ ID NO 8290; 495pp; English.
XX
XX The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3', inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
XX Sequence 17 BP; 3 A; 7 C; 4 G; 0 T; 3 U; 0 Other;
SQ
Query Match 0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 73.3%; Pred. No. 2.3e+02;
Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

OY 1752 CTGTCGTCAATCCAG 1766
Db 2 CUGGCGUCAUCCAG 16

RESULT 410
ACD53856/c
ID ACD53856 standard; RNA; 17 BP.
XX
XX ACD53856;
XX
XX 24-SEP-2003 (first entry)
XX
XX HBV zinzyme substrate sequence #77.
XX
XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX RNA stability; RNA expression; RNA synthesis; antisense;
XX enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
XX amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
XX HBV reverse transcriptase; Enhancer I region; viral replication;
XX degenerative; disease state; HBV infection; HCV infection; cirrhosis;
XX liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX virucide; antiinflammatory; substrate; ss.
XX
XX Hepatitis B virus.
OS
XX
XX WO200281494-A1.
PN
XX 17-OCT-2002.
PD
XX

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PF 26-MAR-2002; 2002WO-US009187.
XX
XX 26-MAR-2001; 2001US-00817879.
PR
PR 08-JUN-2001; 2001US-00877478.
PR
PR 08-JUN-2001; 2001US-0296876P.
PR
PR 24-OCT-2001; 2001US-0335059P.
PR
PR 05-DEC-2001; 2001US-0337055P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.
PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX
XX WPI; 2003-229207/22.
XX
XX Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
XX Example 1; Page 174; 387pp; English.
XX
XX The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HBV
CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberzyme sequences
CC disclosed in the present invention
XX
XX Sequence 17 BP; 2 A; 6 C; 5 G; 0 T; 4 U; 0 Other;
SQ
Query Match 0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 511 TCAGCCGCCAACGGGA 525
Db 15 TCAGCCGCCACGGGA 1

RESULT 411
ACD55586/c
ID ACD55586 standard; RNA; 17 BP.
XX
XX ACD55586;
XX
XX 23-SEP-2003 (first entry)
XX
XX HBV amberzyme substrate sequence #133.
XX
XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX RNA stability; RNA expression; RNA synthesis; antisense;
XX enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
XX amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;

```

KW HBV reverse transcriptase; Enhancer I region; viral replication;  
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
 KW virucide; antiinflammatory; substrate; ss.  
 XX  
 OS Hepatitis B virus.  
 XX  
 PN WO200281494-A1.  
 XX  
 PD 17-OCT-2002.  
 XX  
 PF 26-MAR-2002; 2002WO-US009187.  
 XX  
 PR 26-MAR-2001; 2001US-00817879.  
 PR 08-JUN-2001; 2001US-00877478.  
 PR 08-JUN-2001; 2001US-0296876P.  
 PR 24-OCT-2001; 2001US-0335059P.  
 PR 05-DEC-2001; 2001US-0337055P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MACE/) MACEJAK D.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (MORR/) MORRISSEY D.  
 PA (PVC/) PAVCO P.  
 PA (LEPP/) LEE P.  
 PA (DRAP/) DRAPER K.  
 PA (ROBE/) ROBERTS E.  
 XX  
 PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
 PI Draper K, Roberts E;  
 XX  
 DR WPI; 2003-229207/22.  
 XX  
 PT Novel compound useful for treating cirrhosis, liver failure,  
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
 PT infection.  
 XX  
 PS Example 1; Page 205; 387pp; English.  
 XX  
 CC The present invention relates to nucleic acid molecules which modulate  
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
 CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed  
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 CC genes and HBV viral replication. Also disclosed is a method for screening  
 CC compounds and/or potential therapies directed against HBV, and compounds  
 CC that modulate the expression and/or replication of HCV. The compounds and  
 CC methods of the invention are useful for the treatment of degenerative and  
 CC disease states related to HBV and HCV infection, replication and gene  
 CC expression such as cirrhosis, liver failure, and hepatocellular  
 CC carcinoma. The present sequence represents a substrate for one of the HBV  
 CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberzyme sequences  
 CC disclosed in the present invention  
 XX  
 SQ Sequence 17 BP; 2 A; 6 C; 6 G; 0 T; 3 U; 0 Other;  
 Query Match 0.7%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 2.3e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 511 TCAGCGCCGACGGGA 525  
 DB 16 TCAGCGCCGACGGGA 2  
 RESULT 412  
 ACD50943/C  
 ID ACD50943 standard; RNA; 17 BP.

XX  
 AC ACD50943;  
 XX  
 DT 23-SEP-2003 (first entry)  
 XX  
 DE HBV hammerhead ribozyme substrate sequence #307.  
 XX  
 KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
 KW RNA stability; RNA expression; RNA synthesis; antisense;  
 KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;  
 KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;  
 KW HBV reverse transcriptase; Enhancer I region; viral replication;  
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
 KW virucide; antiinflammatory; substrate; ss.  
 XX  
 OS Hepatitis B virus.  
 XX  
 PN WO200281494-A1.  
 XX  
 PD 17-OCT-2002.  
 XX  
 PF 26-MAR-2002; 2002WO-US009187.  
 XX  
 PR 26-MAR-2001; 2001US-00817879.  
 PR 08-JUN-2001; 2001US-00877478.  
 PR 08-JUN-2001; 2001US-0296876P.  
 PR 24-OCT-2001; 2001US-0335059P.  
 PR 05-DEC-2001; 2001US-0337055P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MACE/) MACEJAK D.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (MORR/) MORRISSEY D.  
 PA (PVC/) PAVCO P.  
 PA (LEPP/) LEE P.  
 PA (DRAP/) DRAPER K.  
 PA (ROBE/) ROBERTS E.  
 XX  
 PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
 PI Draper K, Roberts E;  
 XX  
 DR WPI; 2003-229207/22.  
 XX  
 PT Novel compound useful for treating cirrhosis, liver failure,  
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
 PT infection.  
 XX  
 PS Example 1; Page 142; 387pp; English.  
 XX  
 CC The present invention relates to nucleic acid molecules which modulate  
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
 CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed  
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 CC genes and HBV viral replication. Also disclosed is a method for screening  
 CC compounds and/or potential therapies directed against HBV, and compounds  
 CC that modulate the expression and/or replication of HCV. The compounds and  
 CC methods of the invention are useful for the treatment of degenerative and  
 CC disease states related to HBV and HCV infection, replication and gene  
 CC expression such as cirrhosis, liver failure, and hepatocellular  
 CC carcinoma. The present sequence represents a substrate for one of the HBV  
 CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberzyme sequences  
 CC disclosed in the present invention  
 XX  
 SQ Sequence 17 BP; 1 A; 7 C; 6 G; 0 T; 3 U; 0 Other;  
 Query Match 0.7%; Score 13.4; DB 1; Length 17;

```
Best Local Similarity 93.3%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 511 TCAGCGCCACGGGA 525
DB 17 TCAGCGCCGACGGGA 3
|||||

RESULT 413
ACC63487/c
ID ACC63487 standard; DNA; 17 BP.
AC ACC63487;
XX
DT 01-JUL-2003 (first entry)
DE Murine oligonucleotide associated with tumour suppression, SEQ ID 734.
XX
DE Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; ss.
XX
OS Mus musculus.
XX
PN WO2003025176-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004210.
XX
PR 17-SEP-2001; 2001PR-00011979.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Teleman A, Amson R, Tuijnder M;
XX
PI WPI; 2003-333167/31.
XX
DR New isolated nucleic acid, useful for treating viral diseases associated
XX with tumors and cell degeneration, also related polypeptides, antibodies
XX and transfected cells.
XX
PS Disclosure; Page 116; 738pp; French.
XX
CC The present invention relates to murine oligonucleotides (ACC62754-
XX ACC6806), which are associated with tumour suppression, tumour
XX reversion, apoptosis and virus resistance. The oligonucleotides are
XX useful as (1) as probes and primers for detecting, identifying,
XX quantifying and/or amplifying nucleic acid, e.g. as one component of a
XX gene chip; in vitro as (anti)sense reagents; and (2) for production of
XX recombinant polypeptides. The oligonucleotides are useful for preparation
XX of pharmaceuticals for prevention and/or treatment of viral diseases that
XX are characterised by development of tumours or cell degeneration,
XX specifically cancer but also Alzheimer's disease and schizophrenia
XX
SQ Sequence 17 BP; 1 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1634 CAGAGCGCAGGGACC 1648
DB 15 CAGAGCGCAGGGATC 1
|||||

RESULT 414
ACC64485/c
ID ACC64485 standard; DNA; 17 BP.
XX
AC ACC64485;
XX
```

```
DT 01-JUL-2003 (first entry)
DE Murine oligonucleotide associated with tumour suppression, SEQ ID 1732.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; ss.
XX
OS Mus musculus.
XX
PN WO2003025176-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004210.
XX
PR 17-SEP-2001; 2001PR-00011979.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Teleman A, Amson R, Tuijnder M;
XX
PI WPI; 2003-333167/31.
XX
DR New isolated nucleic acid, useful for treating viral diseases associated
XX with tumors and cell degeneration, also related polypeptides, antibodies
XX and transfected cells.
XX
PS Disclosure; Page 233; 738pp; French.
XX
CC The present invention relates to murine oligonucleotides (ACC62754-
XX ACC6806), which are associated with tumour suppression, tumour
XX reversion, apoptosis and virus resistance. The oligonucleotides are
XX useful as (1) as probes and primers for detecting, identifying,
XX quantifying and/or amplifying nucleic acid, e.g. as one component of a
XX gene chip; in vitro as (anti)sense reagents; and (2) for production of
XX recombinant polypeptides. The oligonucleotides are useful for preparation
XX of pharmaceuticals for prevention and/or treatment of viral diseases that
XX are characterised by development of tumours or cell degeneration,
XX specifically cancer but also Alzheimer's disease and schizophrenia
XX
SQ Sequence 17 BP; 7 A; 3 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 150 TGCATTCTCTGTATC 164
DB 15 TGTATTCTCTGTATC 1
|||||

RESULT 415
ACC64906
ID ACC64906 standard; DNA; 17 BP.
XX
AC ACC64906;
XX
XX
DT 01-JUL-2003 (first entry)
DE Murine oligonucleotide associated with tumour suppression, SEQ ID 2153.
XX
DE Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; ss.
XX
OS Mus musculus.
XX
PN WO2003025176-A2.
XX
PD 27-MAR-2003.
```

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XX PF 17-SEP-2002; 2002WO-IB004210.
XX PR 17-SEP-2001; 2001FR-00011979.
XX PA (MOLE-) MOLECULAR ENGINES LAB.
XX PI Telerman A, Amson R, Tuijnder M;
XX DR WPI; 2003-333167/31.
XX PT New isolated nucleic acid, useful for treating viral diseases associated
XX PT with tumors and cell degeneration, also related polypeptides, antibodies
XX PT and transfected cells.
XX PS Disclosure; Page 282; 738pp; French.
XX CC The present invention relates to murine oligonucleotides (ACC62754-
XX CC ACC68806), which are associated with tumour suppression, tumour
XX CC reversion, apoptosis and virus resistance. The oligonucleotides are
XX CC useful as (1) as probes and primers for detecting, identifying,
XX CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
XX CC gene chip; in vitro as (anti)sense reagents; and (2) for production of a
XX CC recombinant polypeptides. The oligonucleotides are useful for preparation
XX CC of pharmaceuticals for prevention and/or treatment of viral diseases that
XX CC are characterised by development of tumours or cell degeneration,
XX CC specifically cancer but also Alzheimer's disease and schizophrenia
XX SQ Sequence 17 BP; 2 A; 4 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 166 TCTCATGCTTCTTC 180
Db |||||
3 TCTGATGCTTCTTC 17

RESULT 416
ACC66189/c
ID ACC66189 standard; DNA; 17 BP.
XX AC ACC66189;
XX DT 01-JUL-2003 (first entry)
XX DE Murine oligonucleotide associated with tumour suppression, SEQ ID 3436.
XX KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
XX KW tumour suppression; tumour reversion; apoptosis; virus resistance;
XX KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
XX KW schizophrenia; ss.
XX OS Mus musculus.
XX PN WO2003025176-A2.
XX PD 27-MAR-2003.
XX PF 17-SEP-2002; 2002WO-IB004210.
XX PR 17-SEP-2001; 2001FR-00011979.
XX PA (MOLE-) MOLECULAR ENGINES LAB.
XX PI Telerman A, Amson R, Tuijnder M;
XX DR WPI; 2003-333167/31.
XX PT New isolated nucleic acid, useful for treating viral diseases associated
XX PT with tumors and cell degeneration, also related polypeptides, antibodies
XX PT and transfected cells.

XX PF 17-SEP-2002; 2002WO-IB004210.
XX PR 17-SEP-2001; 2001FR-00011979.
XX PA (MOLE-) MOLECULAR ENGINES LAB.
XX PI Telerman A, Amson R, Tuijnder M;
XX DR WPI; 2003-333167/31.
XX PT New isolated nucleic acid, useful for treating viral diseases associated
XX PT with tumors and cell degeneration, also related polypeptides, antibodies
XX PT and transfected cells.

XX PS Disclosure; Page 432; 738pp; French.
XX CC The present invention relates to murine oligonucleotides (ACC62754-
XX CC ACC68806), which are associated with tumour suppression, tumour
XX CC reversion, apoptosis and virus resistance. The oligonucleotides are
XX CC useful as (1) as probes and primers for detecting, identifying,
XX CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
XX CC gene chip; in vitro as (anti)sense reagents; and (2) for production of a
XX CC recombinant polypeptides. The oligonucleotides are useful for preparation
XX CC of pharmaceuticals for prevention and/or treatment of viral diseases that
XX CC are characterised by development of tumours or cell degeneration,
XX CC specifically cancer but also Alzheimer's disease and schizophrenia
XX SQ Sequence 17 BP; 3 A; 5 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1704 GAAGATGATGTCAGA 1718
Db |||||
17 GAAGAAGATGTCAGA 3

RESULT 417
ADF63617/c
ID ADF63617 standard; DNA; 17 BP.
XX AC ADF63617;
XX DT 12-FEB-2004 (first entry)
XX DE Human PCCP1 DNA fragment SEQ ID 8-directed probe - SEQ ID 1521.
XX KW chromatin organisation modifier; CHROMO domain; cytostatic; PCCP1;
XX KW prostate cancer candidate protein 1; tumour; gene therapy; vaccine;
XX KW human; ss; probe.
XX OS Homo sapiens.
XX PN WO2003050284-A1.
XX PD 19-JUN-2003.
XX PF 22-NOV-2002; 2002WO-US037506.
XX PR 10-DEC-2001; 2001US-0339764P.
XX PA (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
XX PI Guo J;
XX DR WPI; 2003-532916/50.
XX PT New prostate cancer candidate protein 1 (PCCP1), useful for preparing a
XX PT composition for treating or preventing a disorder associated with
XX PT decreased or increased expression or activity of PCCP1 e.g., tumor.
XX PS Example 2; SEQ ID NO 1521; 164pp; English.
XX CC The invention relates to a novel isolated nucleic acid that encodes a
XX CC protein with a chromatin organisation modifier (CHROMO) domain. The
XX CC polynucleotide of the invention demonstrates cytostatic activity and may
XX CC be useful for preparing a composition for treating or preventing a
XX CC disorder associated with decreased or increased expression or activity of
XX CC PCCP1 (prostate cancer candidate protein 1), such as a tumour, as well as
XX CC during gene therapy and vaccine production procedures. The current
XX CC sequence is that of the human PCCP1-related DNA fragment SEQ ID 8-
XX CC directed probe of the invention. Note: The current sequence is not shown
XX CC within the specification per se but was retrieved from the Wipoweb
XX CC database.
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SQ Sequence 17 BP; 7 A; 3 C; 4 G; 3 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 2.3e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 1031 GACTTCTTCAGATC 1045  
 DB 15 GACTTCTTCAGATC 1  
 RESULT 418  
 ADI48885/C  
 ID ADI48885 standard; DNA; 17 BP.  
 XX AC ADI48885;  
 XX AC  
 XX XX  
 DT 15-APR-2004 (first entry)  
 XX Human tumour suppression/reversion-related DNA sequence SeqID1388.  
 DE XX  
 XX tumour suppression; tumour reversion; apoptosis; virus resistance;  
 KW cytostatic; virucide; neuroprotective; nontropic; neuroleptic; probe;  
 KW primer; PCR; gene chip; antisense; viral disease; tumour;  
 KW cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human.  
 XX OS Homo sapiens.  
 XX OS  
 XX WO2003025177-A2.  
 XX 27-MAR-2003.  
 XX PF 17-SEP-2002; 2002WO-IB004523.  
 XX PR 17-SEP-2001; 2001FR-00011980.  
 XX PA (MOLE-) MOLECULAR ENGINES LAB.  
 XX PD 27-MAR-2003.  
 XX PI Telerman A, Amson R, Tuijnder M;  
 XX WPI; 2003-313354/30.  
 XX DR  
 XX PT New isolated nucleic acid, useful for treating viral diseases associated  
 XX with tumors and cell degeneration, also related polypeptides, antibodies  
 XX and transfected cells.  
 XX PS Disclosure; SEQ ID NO 1388; 30pp; French.  
 XX CC This invention relates to novel isolated nucleic acid sequences involved  
 CC in the phenomena of tumour suppression, tumour reversion, apoptosis  
 CC and/or resistance to viruses. The invention may be useful for the  
 CC development of compounds with a cytostatic, virucide, neuroprotective,  
 CC nontropic or neuroleptic activity. The DNA sequences may be useful as  
 CC probes and primers for detecting, identifying, quantifying and/or  
 CC amplifying nucleic acid, for example as one component of a gene chip, in  
 CC vitro as antisense reagents and for production of recombinant  
 CC polypeptides. The invention may therefore be useful for preparation of  
 CC pharmaceuticals for prevention and/or treatment of viral diseases that  
 CC are characterised by development of tumours or cell degeneration,  
 CC specifically cancer but also Alzheimer's disease and schizophrenia. The  
 CC present sequence is that of a nucleic acid sequence of the invention.  
 CC Note: The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/publishedpct\_sequences  
 XX SQ Sequence 17 BP; 5 A; 3 C; 4 G; 4 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 2.3e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 150 TGCATTCCTCAGATC 164  
 DB 15 TGCATTCCTCAGATC 1  
 RESULT 420  
 ADI48798/C  
 ID ADI48798 standard; DNA; 17 BP.  
 XX AC ADI48798;  
 XX AC  
 XX TGCATTCCTCAGATC 164  
 DB 15 TGCATTCCTCAGATC 1  
 RESULT 420  
 ADI48798/C  
 ID ADI48798 standard; DNA; 17 BP.  
 XX AC ADI48798;  
 XX AC

XX DT 15-APR-2004 (first entry)  
 XX DE Human tumour suppression/reversion-related DNA sequence SeqID1301.  
 XX KW tumour suppression; tumour reversion; apoptosis; virus resistance;  
 KW cytostatic; virucide; neuroprotective; nootropic; neuroleptic; probe;  
 KW primer; PCR; gene chip; antisense; viral disease; tumour;  
 KW cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human.  
 XX OS Homo sapiens.  
 XX PN WO2003025177-A2.  
 XX PD 27-MAR-2003.  
 XX PF 17-SEP-2002; 2002WO-IB004523.  
 XX PR 17-SEP-2001; 2001FR-00011980.  
 XX PA (MOLE-) MOLECULAR ENGINES LAB.  
 XX PI Telerman A, Amson R, Tuijnder M;  
 XX DR WPI; 2003-313354/30.  
 XX PT New isolated nucleic acid, useful for treating viral diseases associated  
 PT with tumors and cell degeneration, also related polypeptides, antibodies  
 PT and transfected cells.  
 XX PS Disclosure; SEQ ID NO 1301; 30pp; French.  
 XX CC This invention relates to novel isolated nucleic acid sequences involved  
 CC in the phenomena of tumour suppression, tumour reversion, apoptosis  
 CC and/or resistance to viruses. The invention may be useful for the  
 CC development of compounds with a cytostatic, virucide, neuroprotective,  
 CC nootropic or neuroleptic activity. The DNA sequences may be useful as  
 CC probes and primers for detecting, identifying, quantifying and/or  
 CC amplifying nucleic acid, for example as one component of a gene chip, in  
 CC vitro as antisense reagents and for production of recombinant  
 CC polypeptides. The invention may therefore be useful for preparation of  
 CC pharmaceuticals for prevention and/or treatment of viral diseases that  
 CC are characterised by development of tumours or cell degeneration,  
 CC specifically cancer but also Alzheimer's disease and schizophrenia. The  
 CC present sequence is that of a nucleic acid sequence of the invention.  
 CC Note: The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/publishedpct\_sequences  
 XX SQ Sequence 17 BP; 7 A; 2 C; 2 G; 6 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 2.3e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 536 AAATTACAGCTGAT 550  
 Db |||||  
 16 AAATTATAGCTGAT 2  
 RESULT 421  
 ACC52709/c  
 ID ACC52709 standard; DNA; 17 BP.  
 XX AC ACC52709;  
 XX DT 27-JUN-2003 (first entry)  
 XX DE Human tumour suppressor sequence #1476.  
 XX KW ss; tumour suppressor; antitumour; cytostatic; tumour suppression;  
 KW tumour regression; apoptosis; virus resistance; diagnosis;  
 KW cellular degeneration.

XX OS Homo sapiens.  
 XX PN FR2826373-A1.  
 XX PD 27-DEC-2002.  
 XX PF 20-JUN-2001; 2001FR-00008139.  
 XX PR 20-JUN-2001; 2001FR-00008139.  
 XX PA (MOLE-) MOLECULAR ENGINES LAB SA.  
 XX PI Tuijnder M, Telerman A, Amson R;  
 XX DR WPI; 2003-250498/25.  
 XX PT New nucleic acid sequences associated with tumour suppression, regression,  
 PT apoptosis or virus resistance are useful to diagnose and treat viral  
 PT disease, development of tumor cells and cell degeneration.  
 XX PS Claim 1; Page 381; 798pp; French.  
 XX CC This sequence represents an isolated nucleic acid sequence associated  
 CC with tumour suppression or regression, apoptosis or virus resistance. The  
 CC invention relates to these sequences or sequences having at least 80%  
 CC identity to them, and polypeptides encoded by the sequences or  
 CC polypeptides having 80% identity to the polypeptide sequences. The  
 CC invention is used to diagnose or treat viral disease or disease  
 CC characterized by development of tumour cells or cellular degeneration  
 XX SQ Sequence 17 BP; 5 A; 5 C; 2 G; 5 T; 0 U; 0 Other;  
 Query Match 0.7%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 2.3e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 600 AAATTGACTGGGCA 614  
 Db |||||  
 17 AAATTGACTGGGGA 3  
 RESULT 422  
 ADL48321/c  
 ID ADL48321 standard; RNA; 17 BP.  
 XX AC ADL48321;  
 XX DT 20-MAY-2004 (first entry)  
 XX DE Human IKK-gamma substrate sequence #831.  
 XX KW antisense oligonucleotide; neurite growth inhibitor; NOGO;  
 KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;  
 KW protein kinase PKR; cerebrovascular accident;  
 KW central nervous system injury; CNS injury; spinal cord injury; cancer;  
 KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;  
 KW restenosis; asthma; Crohn's disease; diabetes; obesity;  
 KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;  
 KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;  
 KW allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;  
 KW substrate; ds.  
 XX OS Unidentified.  
 XX PN WO200281628-A2.  
 XX PD 17-OCT-2002.  
 XX PF 03-APR-2002; 2002WO-US010512.  
 XX PR 05-APR-2001; 2001US-00827395.  
 PR 29-MAY-2001; 2001US-0294412P.



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PR 28-AUG-2001; 2001US-0315315P.
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX
XX Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;
XX WPI; 2003-058513/05.
XX
XX Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
XX Claim 59; SEQ ID NO 1854; 317pp; English.
XX
XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC nucleic acids of the invention are also useful for down-regulating the
CC expression of a target gene and as a diagnostic tool to examine genetic
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human IKK-
CC gamma substrate sequence.
XX
XX Sequence 17 BP; 2 A; 3 C; 9 G; 0 T; 0 U; 0 Other;
SQ Query Match 0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1347 CTGCCACCACGTTG 1361
DB 16 CTGCCACCACGCTG 2
RESULT 423
ADL48705/C
ID ADL48705 standard; RNA; 17 BP.
XX
XX ADL48705;
XX
XX 20-MAY-2004 (first entry)
XX
XX Human IKK-gamma substrate sequence #1215.
XX
XX antisense oligonucleotide; neurite growth inhibitor; NOGO;
XX prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
XX protein kinase PKR; cerebrovascular accident;
XX central nervous system injury; CNS injury; spinal cord injury; cancer;
XX melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
XX restenosis; asthma; Crohn's disease; diabetes; obesity;
XX autoimmune disease; lupus; multiple sclerosis; transplant rejection;
XX graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
XX allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;
XX substrate; ds.
XX
XX Unidentified.
XX
XX WO200281628-A2.
XX
XX 17-OCT-2002.
XX
XX 03-APR-2002; 2002WO-US010512.
XX
XX 05-APR-2001; 2001US-00827395.
PR 29-MAY-2001; 2001US-0294412P.
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PR 28-AUG-2001; 2001US-0315315P.
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX
XX Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;
XX WPI; 2003-058513/05.
XX
XX Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
XX Claim 59; SEQ ID NO 2238; 317pp; English.
XX
XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC nucleic acids of the invention are also useful for down-regulating the
CC expression of a target gene and as a diagnostic tool to examine genetic
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human IKK-
CC gamma substrate sequence.
XX
XX Sequence 17 BP; 3 A; 3 C; 9 G; 0 T; 2 U; 0 Other;
SQ Query Match 0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1347 CTGCCACCACGTTG 1361
DB 17 CTGCCACCACGCTG 3
RESULT 424
ADL51038
ID ADL51038 standard; RNA; 17 BP.
XX
XX ADL51038;
XX
XX 20-MAY-2004 (first entry)
XX
XX Human PTGDR substrate sequence #157.
XX
XX antisense oligonucleotide; neurite growth inhibitor; NOGO;
XX prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
XX protein kinase PKR; cerebrovascular accident;
XX central nervous system injury; CNS injury; spinal cord injury; cancer;
XX melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
XX restenosis; asthma; Crohn's disease; diabetes; obesity;
XX autoimmune disease; lupus; multiple sclerosis; transplant rejection;
XX graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
XX allergy; asthma; allergic rhinitis; atopic dermatitis; human PTGDR;
XX substrate; ds.
XX
XX Unidentified.
XX
XX WO200281628-A2.
XX
XX 17-OCT-2002.
XX
XX 03-APR-2002; 2002WO-US010512.
XX
XX 05-APR-2001; 2001US-00827395.
PR 29-MAY-2001; 2001US-0294412P.
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PR 28-AUG-2001; 2001US-0315315P.
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;
XX WPI; 2003-058513/05.
XX
XX Novel enzymatic nucleic acid that down-regulates expression of neurite
XX growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
XX protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
XX Claim 161; SEQ ID NO 4571; 317pp; English.
XX
XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)
XX that down regulate the expression or inhibit the function of a receptor
XX for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
XX IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
XX invention are useful for treating: cerebrovascular accident, central
XX nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
XX lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
XX restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
XX disease, lupus, multiple sclerosis, transplant/graft rejection,
XX ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
XX conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
XX nucleic acids of the invention are also useful for down-regulating the
XX expression of a target gene and as a diagnostic tool to examine genetic
XX drifts and mutations within diseased cells or to detect the presence of a
XX target RNA in a cell. The present RNA sequence represents a human PKR
XX substrate sequence.
XX
XX Sequence 17 BP; 3 A; 4 C; 5 G; 0 T; 5 U; 0 Other;

Query Match 0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 66.7%; Pred. No. 2.3e+02;
Matches 10; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 1224 TCGCGCTCACTATGG 1238
DB 1 UCGCGCUUACUAGG 15

RESULT 425
ADL49813/c
ID ADL49813 standard; RNA; 17 BP.
XX
XX ADL49813;
XX
XX 20-MAY-2004 (first entry)
XX
XX Human PKR substrate sequence #927.
XX
XX antisense oligonucleotide; neurite growth inhibitor; NOGO;
XX prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
XX protein kinase PKR; cerebrovascular accident;
XX central nervous system injury; CNS injury; spinal cord injury; cancer;
XX melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
XX restenosis; asthma; Crohn's disease; diabetes; obesity;
XX autoimmune disease; lupus; multiple sclerosis; transplant rejection;
XX graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
XX allergy; asthma; allergic rhinitis; atopic dermatitis; human PKR;
XX substrate; ds.
XX
XX Unidentified.
XX
XX WO200281628-A2.
XX
XX 17-OCT-2002.
XX
XX 03-APR-2002; 2002WO-US010512.
XX
XX 05-APR-2001; 2001US-00827395.
XX
XX 29-MAY-2001; 2001US-0294412P.
XX
PR 28-AUG-2001; 2001US-0315315P.
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;
XX WPI; 2003-058513/05.
XX
XX Novel enzymatic nucleic acid that down-regulates expression of neurite
XX growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
XX protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
XX Claim 161; SEQ ID NO 4571; 317pp; English.
XX
XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)
XX that down regulate the expression or inhibit the function of a receptor
XX for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
XX IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
XX invention are useful for treating: cerebrovascular accident, central
XX nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
XX lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
XX restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
XX disease, lupus, multiple sclerosis, transplant/graft rejection,
XX ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
XX conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
XX nucleic acids of the invention are also useful for down-regulating the
XX expression of a target gene and as a diagnostic tool to examine genetic
XX drifts and mutations within diseased cells or to detect the presence of a
XX target RNA in a cell. The present RNA sequence represents a human PKR
XX substrate sequence.
XX
XX Sequence 17 BP; 4 A; 4 C; 3 G; 0 T; 6 U; 0 Other;

Query Match 0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 800 TAGGCTTGGGAAGAA 814
DB 15 TAGTCTTGGGAAGAA 1

RESULT 426
ADL51037
ID ADL51037 standard; RNA; 17 BP.
XX
XX ADL51037;
XX
XX 20-MAY-2004 (first entry)
XX
XX Human PTGDR substrate sequence #156.
XX
XX antisense oligonucleotide; neurite growth inhibitor; NOGO;
XX prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
XX protein kinase PKR; cerebrovascular accident;
XX central nervous system injury; CNS injury; spinal cord injury; cancer;
XX melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
XX restenosis; asthma; Crohn's disease; diabetes; obesity;
XX autoimmune disease; lupus; multiple sclerosis; transplant rejection;
XX graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
XX allergy; asthma; allergic rhinitis; atopic dermatitis; human PTGDR;
XX substrate; ds.
XX
XX Unidentified.
XX
XX WO200281628-A2.
XX
XX 17-OCT-2002.
XX
XX 03-APR-2002; 2002WO-US010512.
XX
XX 05-APR-2001; 2001US-00827395.
XX
XX 29-MAY-2001; 2001US-0294412P.
XX
PR
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PR 28-AUG-2001; 2001US-0315315P.
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX
XX Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;
XX WPI; 2003-058513/05.
DR
XX
XX Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
XX Claim 161; SEQ ID NO 4570; 317pp; English.
XX
XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC nucleic acids of the invention are also useful for down-regulating the
CC expression of a target gene and as a diagnostic tool to examine genetic
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human PKR
CC substrate sequence.
XX
XX Sequence 17 BP; 4 A; 4 C; 4 G; 0 T; 5 U; 0 Other;
SQ
Query Match 0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 66.7%; Pred. No. 2.3e+02;
Matches 10; Conservative 4; Mismatches 1; Indels 0; Gaps 0;
QY 1224 TCGCCTCACTATGG 1238
Db 2 UCGCGCUACUAGG 16
:||||:|:|:|
RESULTS
ADL51434
ID ADL51434 standard; RNA; 17 BP.
XX
XX ADL51434;
AC
XX
XX 20-MAY-2004 (first entry)
DT
XX
XX Human PTGDR substrate sequence #553.
DE
XX
XX antisense oligonucleotide; neurite growth inhibitor; NOGO;
KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
KW protein kinase PKR; cerebrovascular accident;
KW central nervous system injury; CNS injury; spinal cord injury; cancer;
KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
KW restenosis; asthma; Crohn's disease; diabetes; obesity;
KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
KW allergy; asthma; allergic rhinitis; atopic dermatitis; human PTGDR;
KW substrate; ds.
XX
XX Unidentified.
OS
XX
XX W0200281628-A2.
FN
XX
XX 17-OCT-2002.
PD
XX
XX 03-APR-2002; 2002WO-US010512.
PP
XX
XX 05-APR-2001; 2001US-00827395.
PR
XX 29-MAY-2001; 2001US-0294412P.
PR
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PR 28-AUG-2001; 2001US-0315315P.
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX
XX Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;
XX WPI; 2003-058513/05.
DR
XX
XX Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
XX Claim 161; SEQ ID NO 4967; 317pp; English.
XX
XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC nucleic acids of the invention are also useful for down-regulating the
CC expression of a target gene and as a diagnostic tool to examine genetic
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human PKR
CC substrate sequence.
XX
XX Sequence 17 BP; 3 A; 4 C; 4 G; 0 T; 6 U; 0 Other;
SQ
Query Match 0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 66.7%; Pred. No. 2.3e+02;
Matches 10; Conservative 4; Mismatches 1; Indels 0; Gaps 0;
QY 1224 TCGCCTCACTATGG 1238
Db 3 UCGCGCUACUAGG 17
:||||:|:|:|
RESULTS
ADK13140/c
ID ADK13140 standard; DNA; 17 BP.
XX
XX ADK13140;
AC
XX
XX 20-MAY-2004 (first entry)
DT
XX
XX Human glioma endothelial marker (GEM) long tag SEQ ID NO:318.
DE
XX
XX glioma; brain tissue; neoplastic; glioma endothelial marker; GEM;
KW anticancer; angioma; immune response; cytostatic;
KW multi-drug sensitive glioma; human; long tag; ss.
XX
XX Homo sapiens.
OS
XX
XX Synthetic.
XX
XX W02004016758-A2.
FN
XX
XX 26-FEB-2004.
PD
XX
XX 15-AUG-2003; 2003WO-US025614.
PP
XX
XX 15-AUG-2002; 2002US-0403390P.
PR
XX 01-APR-2003; 2003US-0458978P.
PR
XX
XX (GENZ ) GENZYME CORP.
PA (UYJO ) UNIV JOHNS HOPKINS.
XX
XX Madden SI, Wang CJ, Cook BP, Lattera J, Walter K;
PI
XX
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DR WPI; 2004-247973/23.  
XX  
PT Diagnosing glioma by detecting expression product of any one of 255  
PT genes, glioma endothelial markers, in brain tissue sample suspected of  
PT being neoplastic, and comparing the expression with expression in normal  
PT brain tissue sample.  
XX  
PS Example 2; SEQ ID NO 318; 114pp; English.  
XX  
XX The present invention describes a method (M1) for aiding in the diagnosis  
CC of glioma. (M1) involves detecting an expression product of at least one  
CC gene (I) in a first brain tissue sample (T) suspected of being  
CC neoplastic, where (I) is chosen from any one of 255 genes (glioma  
CC endothelial markers (GEMs)) as given in specification, and comparing the  
CC expression of (I) in (T) with expression of (I) in a second normal brain  
CC tissue sample (R), where increased expression of (I) in (T) relative to  
CC (R), identifies (T) as likely to be neoplastic. Also described: (1)  
CC treating (M2) glioma involves contacting cells of the glioma with an  
CC antibody that specifically binds to a extracellular epitope; (2)  
CC identifying (M3) a test compound as potential anticancer or antglioma  
CC drug involves contacting a test compound with the cell which expresses  
CC (I), monitoring an expression product of the at least one gene and  
CC identifying test compound as a potential anticancer drug if it decreases  
CC the expression of at least one gene; (3) identifying (M4) a test compound  
CC as potential anticancer or antglioma drug involves contacting a test  
CC compound with the cell which expresses mRNA of at least one gene  
CC identified by a tag as described above, monitoring mRNA of the gene, and  
CC identifying the test compound as a potential anticancer drug if it  
CC decreases the expression of at least one gene; and (4) inducing (M5) an  
CC immune response to glioma involves administering to a mammal, a protein  
CC or (I). (I) have cytostatic activities, and can be used to trigger immune  
CC destruction of glioma cells, and as immune response inducers. (M1) is  
CC useful for aiding in diagnosing glioma. (M2) is useful for treating multi  
CC -drug sensitive glioma in a human. (M5) is useful for inducing an immune  
CC response to a glioma in a mammal having glioma or in a mammal who has had  
CC a glioma surgically removed. The present sequence represents a human GEM  
CC long tag oligonucleotide, which is used in the exemplification of the  
XX present invention.  
XX  
XX Sequence 17 BP; 2 A; 3 C; 6 G; 6 T; 0 U; 0 Other;  
SQ  
Query Match 0.7%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.3e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 114 TCACGTGCACGCCA 128  
DB 15 TCACGTGCACGCCA 1  
RESULT 429  
ADM59598/c  
ID ADM59598 standard; RNA; 17 BP.  
XX  
XX ADM59598;  
XX  
XX 03-JUN-2004 (first entry)  
DT  
XX Hepatitis B virus (HBV) RNA target sequence #1732.  
DE  
XX Hepatitis B virus; HBV; ss; enzymatic nucleic acid; RNA cleavage;  
KW hepatitis B virus infection; hepatitis; hepatocellular carcinoma;  
KW cirrhosis; liver failure; lamivudine; interferon; genetic drift;  
KW virucide; hepatotropic; antiinflammatory; cytostatic.  
XX  
OS Hepatitis B virus.  
XX  
XX US2004054156-A1.  
PN  
XX 18-MAR-2004.  
PD  
XX 15-JAN-2003; 2003US-00342902.  
PF  
XX 14-MAY-1992; 92US-00882712.

PR 14-MAY-1992; 92US-00882712.  
PR 07-FEB-1994; 94US-00193627.  
PR 08-NOV-1999; 99US-00436430.  
PR 20-MAR-2000; 2000US-00531025.  
PR 09-AUG-2000; 2000US-00636385.  
PR 24-OCT-2000; 2000US-00696347.  
PR 08-JUN-2001; 2001US-00877478.  
XX  
XX (DRAP/) DRAPER K.  
PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J A.  
PA (MORR/) MORRISSEY D.  
XX  
XX Draper K, Blatt L, Mcswiggen JA, Morrissey D;  
PI WPI; 2004-247781/23.  
DR  
XX Novel enzymatic nucleic acid molecule such as DNazymes and inozymes  
XX specifically cleaving RNA derived from hepatitis B virus and comprising  
XX one or more binding arms, useful for treating hepatitis and cirrhosis.  
PS Disclosure; SEQ ID NO 1732; 122pp; English.  
XX  
XX The invention relates to an enzymatic nucleic acid molecule that  
CC specifically cleaves RNA derived from hepatitis B virus (HBV) and  
CC comprising one or more binding arms, without requiring the presence of a  
CC 2'-OH group within the molecule for activity. The nucleic acids are  
CC useful for treating hepatitis B virus infection, hepatitis,  
CC hepatocellular carcinoma, cirrhosis and liver failure, either alone or in  
CC combination with other therapies such as lamivudine and interferons. The  
CC nucleic acids are useful as diagnostic tools to examine genetic drift and  
CC mutations within diseased cells, for detecting the presence of HBV RNA in  
CC a cell, for the study of RNA and for down-regulating gene expression of  
CC target genes in bacterial, fungal, viral, plant or mammalian cells. This  
CC sequence represents an HBV RNA target sequence, used in the scope of the  
CC invention. Note: The sequence data for this patent is also available in  
CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.  
XX  
XX Sequence 17 BP; 2 A; 6 C; 5 G; 0 T; 4 U; 0 Other;  
SQ  
Query Match 0.7%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.3e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 511 TCACGCCCAACGGGA 525  
DB 15 TCACGCCCAACGGGA 1  
RESULT 430  
ADM60194/c  
ID ADM60194 standard; RNA; 17 BP.  
XX  
XX ADM60194;  
XX  
XX 03-JUN-2004 (first entry)  
DT  
XX Hepatitis B virus (HBV) RNA target sequence #2328.  
DE  
XX Hepatitis B virus; HBV; ss; enzymatic nucleic acid; RNA cleavage;  
KW hepatitis B virus infection; hepatitis; hepatocellular carcinoma;  
KW cirrhosis; liver failure; lamivudine; interferon; genetic drift;  
KW virucide; hepatotropic; antiinflammatory; cytostatic.  
XX  
OS Hepatitis B virus.  
XX  
XX US2004054156-A1.  
PN  
XX 18-MAR-2004.  
PD  
XX 15-JAN-2003; 2003US-00342902.  
PF  
XX 14-MAY-1992; 92US-00882712.

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PR 07-FEB-1994; 94US-00193627.
PR 08-NOV-1999; 99US-00436430.
PR 20-MAR-2000; 2000US-00531025.
PR 09-AUG-2000; 2000US-00636385.
PR 24-OCT-2000; 2000US-00696347.
PR 08-JUN-2001; 2001US-00877478.
XX
XX (DRAP/) DRAPER K.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
PA (MORR/) MORRISSEY D.
XX
XX Draper K, Blatt L, Mcswiggen JA, Morrissey D;
XX WPI; 2004-247781/23.
XX
XX Novel enzymatic nucleic acid molecule such as DNazymes and inozymes
XX specifically cleaving RNA derived from hepatitis B virus and comprising
XX one or more binding arms, useful for treating hepatitis and cirrhosis.
XX
XX Disclosure; SEQ ID NO 2328; 122pp; English.
XX
XX The invention relates to an enzymatic nucleic acid molecule that
XX specifically cleaves RNA derived from hepatitis B virus (HBV) and
XX comprising one or more binding arms, without requiring the presence of a
XX 2'-OH group within the molecule for activity. The nucleic acids are
XX useful for treating hepatitis B virus infection, hepatitis,
XX hepatocellular carcinoma, cirrhosis and liver failure, either alone or in
XX combination with other therapies such as lamivudine and interferons. The
XX nucleic acids are useful as diagnostic tools to examine genetic drift and
XX mutations within diseased cells, for detecting the presence of HBV RNA in
XX a cell, for the study of RNA and for down-regulating gene expression of
XX target genes in bacterial, fungal, viral, plant or mammalian cells. This
XX sequence represents an HBV RNA target sequence, used in the scope of the
XX invention. Note: The sequence data for this patent is also available in
XX electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX
XX SQ Sequence 17 BP; 2 A; 6 C; 6 G; 0 T; 3 U; 0 Other;
XX
Query Match 0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 511 TCAGCGCCCAACGGGA 525
Db 16 TCAGCGCCGACGGGA 2
|||||
|

RESULT 431
ADM58206/c
ID ADM58206 standard; RNA; 17 BP.
XX
XX ADM58206;
XX
XX 03-JUN-2004 (first entry)
XX
XX Hepatitis B virus (HBV) RNA target sequence #340.
XX
XX Hepatitis B virus; HBV; ss; enzymatic nucleic acid; RNA cleavage;
XX hepatitis B virus infection; hepatitis; hepatocellular carcinoma;
XX cirrhosis; liver failure; lamivudine; interferon; genetic drift;
XX virucide; hepatotropic; antiinflammatory; cytostatic.
XX
XX Hepatitis B virus.
XX
XX US2004054156-A1.
XX
XX 18-MAR-2004.
XX
XX 15-JAN-2003; 2003US-00342902.
XX
XX 14-MAY-1992; 92US-00882712.
PR 07-FEB-1994; 94US-00193627.

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PR 08-NOV-1999; 99US-00436430.
PR 20-MAR-2000; 2000US-00531025.
PR 09-AUG-2000; 2000US-00636385.
PR 24-OCT-2000; 2000US-00696347.
PR 08-JUN-2001; 2001US-00877478.
XX
XX (DRAP/) DRAPER K.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
PA (MORR/) MORRISSEY D.
XX
XX Draper K, Blatt L, Mcswiggen JA, Morrissey D;
XX WPI; 2004-247781/23.
XX
XX Novel enzymatic nucleic acid molecule such as DNazymes and inozymes
XX specifically cleaving RNA derived from hepatitis B virus and comprising
XX one or more binding arms, useful for treating hepatitis and cirrhosis.
XX
XX Disclosure; SEQ ID NO 340; 122pp; English.
XX
XX The invention relates to an enzymatic nucleic acid molecule that
XX specifically cleaves RNA derived from hepatitis B virus (HBV) and
XX comprising one or more binding arms, without requiring the presence of a
XX 2'-OH group within the molecule for activity. The nucleic acids are
XX useful for treating hepatitis B virus infection, hepatitis,
XX hepatocellular carcinoma, cirrhosis and liver failure, either alone or in
XX combination with other therapies such as lamivudine and interferons. The
XX nucleic acids are useful as diagnostic tools to examine genetic drift and
XX mutations within diseased cells, for detecting the presence of HBV RNA in
XX a cell, for the study of RNA and for down-regulating gene expression of
XX target genes in bacterial, fungal, viral, plant or mammalian cells. This
XX sequence represents an HBV RNA target sequence, used in the scope of the
XX invention. Note: The sequence data for this patent is also available in
XX electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX
XX SQ Sequence 17 BP; 1 A; 7 C; 6 G; 0 T; 3 U; 0 Other;
XX
Query Match 0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 511 TCAGCGCCCAACGGGA 525
Db 17 TCAGCGCCGACGGGA 3
|||||
|

RESULT 432
ACN73198/c
ID ACN73198 standard; DNA; 17 BP.
XX
XX ACN73198;
XX
XX 02-DEC-2004 (first entry)
XX
XX Human GDMPLP-1 probe SEQ ID NO:10100.
XX
XX Human; ss; probe; myosin-like protein-1; hGDMPLP-1;
XX hGDMPLP-1 agonist hGDMPLP antagonist; hGDMPLP inhibitor; heart disorder;
XX skeletal muscle function.
XX
XX Homo sapiens.
XX
XX US2004137589-A1.
XX
XX 15-JUL-2004.
XX
XX 26-NOV-2003; 2003US-00723361.
XX
XX 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.

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PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
PR 25-MAY-2001; 2001US-00866108.
XX
PA (GUY/) GU Y.
PA (JIY/) JI Y.
PA (PENN/) PENN S G.
PA (HANZ/) HANZEL D K.
PA (RANK/) RANK D.
PA (CHEN/) CHEN W.
PA (SHAN/) SHANNON M E.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank D, Chen W, Shannon ME;
XX WPI; 2004-533378/51.
XX
PT Novel myosin-like protein-1, useful for treating or preventing disorder
PT associated with decreased expression or activity of human genome-derived
PT myosin-like protein-1 such as disorder of heart and/or skeletal muscle
PT function.
XX
PT Disclosure; SEQ ID NO 10100; Opp; English.
XX
PS
XX
CC The invention relates to a novel polypeptide (I) comprising a sequence
CC (S1) of myosin-like protein-1 (hGDMLP-1) having 2568 amino acids fully
CC defined in the specification, a fragment of at least 8 amino acids of
CC (S1), 95% deviation from (S1) which are conservative substitutions, and
CC 65% identity to (S1). A polypeptide of the invention acts as an agonist or
CC antagonist of hGDMLP-1, or as an inhibitor of hGDMLP-1 activity. A
CC pharmaceutical composition of the invention is useful for treating or
CC preventing a disorder associated with decreased expression or activity of
CC hGDMLP-1, such as a disorder of heart and/or skeletal muscle function.
CC The present sequence represents a 17-mer nucleotide, used in the
CC invention for scanning the sequence represented in ACN63103
XX
XX Sequence 17 BP; 3 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 360 CCATGAGGTGGGCAA 374
DB 16 CCATCAGGTGGGCAA 2
RESULT 433
ACN73199/c
ID ACN73199 standard; DNA; 17 BP.
XX
XX ACN73199;
XX
XX 02-DEC-2004 (first entry)
XX
XX Human GDMLP-1 probe SEQ ID NO:10101.
XX
XX Human; ss; probe; myosin-like protein-1; hGDMLP-1;
XX hGDMLP-1 agonist hGDMLP antagonist; hGDMLP inhibitor; heart disorder;
XX skeletal muscle function.
XX
XX Homo sapiens.
XX
XX US2004137589-A1.
XX
```

```
PD 15-JUL-2004.
XX
XX 26-NOV-2003; 2003US-00723361.
XX
XX 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
PR 25-MAY-2001; 2001US-00866108.
XX
XX (GUY/) GU Y.
XX (JIY/) JI Y.
XX (PENN/) PENN S G.
XX (HANZ/) HANZEL D K.
XX (RANK/) RANK D.
XX (CHEN/) CHEN W.
XX (SHAN/) SHANNON M E.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank D, Chen W, Shannon ME;
XX WPI; 2004-533378/51.
XX
XX Novel myosin-like protein-1, useful for treating or preventing disorder
XX associated with decreased expression or activity of human genome-derived
XX myosin-like protein-1 such as disorder of heart and/or skeletal muscle
XX function.
XX
XX Disclosure; SEQ ID NO 10101; Opp; English.
XX
XX The invention relates to a novel polypeptide (I) comprising a sequence
XX (S1) of myosin-like protein-1 (hGDMLP-1) having 2568 amino acids fully
XX defined in the specification, a fragment of at least 8 amino acids of
XX (S1), 95% deviation from (S1) which are conservative substitutions, and
XX 65% identity to (S1). A polypeptide of the invention acts as an agonist or
XX antagonist of hGDMLP-1, or as an inhibitor of hGDMLP-1 activity. A
XX pharmaceutical composition of the invention is useful for treating or
XX preventing a disorder associated with decreased expression or activity of
XX hGDMLP-1, such as a disorder of heart and/or skeletal muscle function.
XX The present sequence represents a 17-mer nucleotide, used in the
XX invention for scanning the sequence represented in ACN63103
XX
XX Sequence 17 BP; 3 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 360 CCATGAGGTGGGCAA 374
DB 15 CCATCAGGTGGGCAA 1
RESULT 434
ACN73197/c
ID ACN73197 standard; DNA; 17 BP.
XX
XX ACN73197;
XX
XX 02-DEC-2004 (first entry)
XX
XX Human GDMLP-1 probe SEQ ID NO:10099.
XX
```

KW Human; ss; probe; myosin-like protein-1; hGDMPLP-1;  
 KW hGDMPLP-1 agonist hGDMPLP antagonist; hGDMPLP inhibitor; heart disorder;  
 KW skeletal muscle function.

XX Homo sapiens.

XX US2004137589-A1.

XX 15-JUL-2004.

XX 26-NOV-2003; 2003US-00723361.

XX 26-MAY-2000; 2000US-0207456P.

XX 21-SEP-2000; 2000US-0234687P.

XX 27-SEP-2000; 2000US-0236359P.

XX 04-OCT-2000; 2000GB-00024263.

XX 30-JAN-2001; 2001WO-US000661.

XX 30-JAN-2001; 2001WO-US000662.

XX 30-JAN-2001; 2001WO-US000663.

XX 30-JAN-2001; 2001WO-US000664.

XX 30-JAN-2001; 2001WO-US000665.

XX 30-JAN-2001; 2001WO-US000666.

XX 30-JAN-2001; 2001WO-US000667.

XX 30-JAN-2001; 2001WO-US000668.

XX 30-JAN-2001; 2001WO-US000669.

XX 30-JAN-2001; 2001WO-US000670.

XX 05-FEB-2001; 2001US-0266860P.

XX 25-MAY-2001; 2001US-00866108.

XX (GUY/) GU Y.

XX (JIYI/) JI Y.

XX (PENN/) PENN S G.

XX (HANK/) HANZEL D K.

XX (RANK/) RANK D.

XX (CHEN/) CHEN W.

XX (SHAN/) SHANNON M E.

XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank D, Chen W, Shannon ME;

XX WPI; 2004-533378/51.

XX Novel myosin-like protein-1, useful for treating or preventing disorder

XX associated with decreased expression or activity of human genome-derived

XX myosin-like protein-1 such as disorder of heart and/or skeletal muscle

XX function.

XX Disclosure; SEQ ID NO 10099; Opp; English.

XX The invention relates to a novel polypeptide (I) comprising a sequence

XX (S1) of myosin-like protein-1 (hGDMPLP-1) having 2568 amino acids fully

XX defined in the specification, a fragment of at least 8 amino acids of

XX (S1), 95% deviation from (S1) which are conservative substitutions, and

XX 65% identity to (S1). A polypeptide of the invention acts as an agonist or

XX antagonist of hGDMPLP-1, or as an inhibitor of hGDMPLP-1 activity. A

XX pharmaceutical composition of the invention is useful for treating or

XX preventing a disorder associated with decreased expression or activity of

XX hGDMPLP-1, such as a disorder of heart and/or skeletal muscle function.

XX The present sequence represents a 17-mer nucleotide, used in the

XX invention for scanning the sequence represented in ACN63103

XX Sequence 17 BP; 2 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

XX Query Match 0.7%; Score 13.4; DB 1; Length 17;

XX Best Local Similarity 93.3%; Pred. No. 2.3e+02;

XX Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 360 CCATGAGGTGGCAA 374

Db 17 CCATCAGGTGGCAA 3

Search completed: August 8, 2005, 10:47:26

Job time : 12 secs





RESULT 1	AZ864576	20 bp	DNA	linear	GSS 21-FEB-2001
AZ864576	2M0174C15F	Mouse	10kb	plasmid	UUCGCM library
LOCUS	clone UUCG2M0174C15	F	genomic	survey	sequence.
DEFINITION	AZ864576				
ACCESSION	AZ864576.1	GI:13064015			
VERSION					
KEYWORDS	GSS.				
SOURCE	Mus musculus	(house mouse)			
ORGANISM	Mus musculus				
	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;				
	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.				
REFERENCE	1 (bases 1 to 20)				
AUTHORS	Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C.,				
	Islan,H., Longacre,S., Mahmoud,N., Meenen,E., Pedersen,T.,				
	Reilly,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von				

morsitans morsitans and expression analysis of putative immune

JOURNAL  
MEDLINE  
PUBMED  
COMMENT

response genes  
Genome Biol. 4 (10), R63 (2003)  
22881942  
14519198  
Contact: Hall N  
Pathogen Sequencing Unit  
The Sanger Institute The Wellcome Trust Genome Campus  
Hinxton, Cambridge, CB10 1SA, UK  
Request for clones, please contact: Mike Lehane  
Prof. M.J.Lehane  
School of Biological Sciences,  
University of Wales,  
Bangor LL57 2UW

All clones with suffix q1c are reverse primer reads starting at 5'  
end of the cDNA all p1c reads are from  
the 3' end.

#### FEATURES

source

1. .21

Location/Qualifiers  
/organism="Glossina morsitans morsitans"  
/mol\_type="mRNA"  
/sub\_species="morsitans"  
/db\_xref="taxon:37546"  
/clone="Tsei10193.p1c"  
/cissue type="adult infected gut"  
/clone\_lib="Glossina morsitans morsitans adult infected  
gut"  
/notes="country: Zimbabwe; EST from adult gut infected with  
T.brucei"

Query Match 0.8%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 85.7%; Pred. No. 1.1;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1652 AAGAAAAATAGAGAAAAA 1672

Db 21 AAAAAAAAAAAAAAAAAA 1

#### RESULT 3

AZ375620 20 bp DNA linear GSS 02-OCT-2000  
LOCUS  
DEFINITION  
clone UUGC1M0129A08 F, genomic survey sequence.

ACCESSION  
AZ375620  
VERSION  
GSS.  
SOURCE  
Mus musculus (house mouse)

ORGANISM  
Mus musculus  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.  
1 (bases 1 to 20)  
Dunn, D., Aoyagi, A., Barber, M., Beacorn, T., Duval, B., Hamil, C.,  
Islam, H., Longacre, S., Mahmoud, M., Meenen, E., Pedersen, T.,  
Reilly, M., Rose, M., Rose, R., Stokes, R., Tingey, A., von  
Niederhausern, A. and Wright, D. Weiss, R.

Mouse whole genome scaffolding with paired end reads from 10kb

Plasmid inserts

Unpublished (2000)

JOURNAL  
COMMENT

Contact: Robert B. Weiss  
University of Utah Genome Center  
University of Utah  
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT  
84112, USA

Tel: 801 585 5606

Fax: 801 585 7177

Email: ddunn@genetics.utah.edu

Insert Length: 10000 Std Error: 0.00

Plats: 0129 row: A column: 08

Seq primer: CGTGTAAACGACGCCAGT

Class: plasmid ends

High quality sequence stop: 20.

Location/Qualifiers

#### FEATURES

source

1. .20

/organism="Mus musculus"  
/mol\_type="genomic DNA"  
/strain="C57BL/6J"  
/db\_xref="taxon:10090"  
/clone="UUGC1M0129A08"  
/sex="Male"  
/lab\_host="E. Coli strain XL10-Gold, Tl-resistant, F-"  
/clone\_lib="Mouse 10kb plasmid UUGC1M library"  
/note="Vector: FWD42nv; Purified genomic DNA from M.  
musculus C57BL/6J (male) was obtained from the Jackson  
Laboratory Mouse DNA Resource  
(http://www.jax.org/resources/documents/dnares/). The DNA  
was hydrodynamically sheared by repeated passage through a  
0.005 inch orifice at constant velocity. The sheared DNA  
was blunt end-repaired with T4 DNA polymerase and T4  
polynucleotide kinase. Adaptor oligonucleotides were  
ligated to the blunt ends in high molar excess. The  
adaptored DNA was purified and size-selected for a 9.5 to  
10.5 kb range using preparative agarose gel  
electrophoresis. Vector DNA was prepared from a derivative  
of pWD42 (gi|4732114|gb|AF129072.1), a copy-number  
inducible derivative of plasmid R1. The vector was ligated  
with adaptors complementary to the insert adaptors and  
purified. The sheared, adaptored mouse DNA was annealed to  
adaptored vector DNA, and transformed into  
chemically-competent E. coli XL10-Gold (Stratagene) cells  
and selected for ampicillin resistance."

Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1653 AAGAAAAATAGAGAAAAA 1672

Db 1 AAAAAAAAAAAAAAAAAA 20

#### RESULT 4

AZ949997

LOCUS

DEFINITION

clone UUGC2M0213D24 R, genomic survey sequence.

ACCESSION

AZ949997

VERSION

GSS.

KEYWORDS

SOURCE

ORGANISM

Mus musculus (house mouse)

Mus musculus

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

1 (bases 1 to 20)

Dunn, D., Aoyagi, A., Barber, M., Beacorn, T., Duval, B., Hamil, C.,

Islam, H., Longacre, S., Mahmoud, M., Meenen, E., Pedersen, T.,

Reilly, M., Rose, M., Rose, R., Stokes, R., Tingey, A., von

Niederhausern, A. and Wright, D. Weiss, R.

Mouse whole genome scaffolding with paired end reads from 10kb

Plasmid inserts

Unpublished (2000)

Contact: Robert B. Weiss

University of Utah Genome Center

University of Utah

Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT

84112, USA

Tel: 801 585 5606

Fax: 801 585 7177

Email: ddunn@genetics.utah.edu

Insert Length: 10000 Std Error: 0.00

Plate: 0213 row: D column: 24

Seq primer: CACACAGGAACAGCTATGACC

Class: plasmid ends

High quality sequence stop: 20.

Location/Qualifiers

source

/organism="Mus musculus"  
/mol\_type="genomic DNA"  
/strain="C57BL/6J"  
/db\_xref="taxon:10090"  
/clone="UUGC2M0213D24"  
/sex="Female"  
/lab\_host="E. coli strain XL10-Gold, T1-resistant, F-"  
/clone\_lib="Mouse 10kb plasmid UUGC2M library"  
/notes="Vector: PWD42nv; Purified genomic DNA from M. musculus C57BL/6J (female) was obtained from the Jackson Laboratory Mouse DNA Resource  
(http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptor DNA was purified and size-selected for a 9.5 to 10.5 Kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWB42 (gi14732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptor mouse DNA was annealed to adaptor vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1653 AAGAAAATAAGAGAAAAA 1672  
||| ||||| ||| |||||  
Db 1 AAAAAATAAAAAA 20

RESULT 5  
CL680297/c  
LOCUS  
DEFINITION  
CL680297 20 bp DNA linear GSS 09-JUL-2004  
PRI0128c.G05 2 - PRI0128c.BR (20) Note: Recurring String Mixed stage fosmid library of P. pacificus var. California Pristionchus pacificus genomic, genomic survey sequence.

ACCESSION  
VERSION  
KEYWORDS  
SOURCE  
ORGANISM  
CL680297.1 GI:50187127  
Pristionchus pacificus  
Pristionchus pacificus  
Eukaryota; Metazoa; Nematoda; Chromadorea; Diplogasterida;  
Neodiplogasteridae; Pristionchus.

REFERENCE  
AUTHORS  
TITLE  
JOURNAL  
COMMENT  
Srinivasan,J., Otto,G.W., Kahlow,U., Geisler,R. and Sommer,R.J.  
1 (bases 1 to 20)  
ApadB: an AcedB database for the nematode satellite organism  
Pristionchus pacificus  
Nucleic Acids Res. 32 (1), D421-D422 (2004)  
Contact: Sommer RJ

Evolutionary Biology  
Max-Planck-Institute for Developmental Biology  
Spemannstr. 37-39, Tuebingen D-72076, Germany  
Tel: 00497071601371  
Fax: 00497071601498  
Email: ralf.sommer@tuebingen.mpg.de  
This library was generated at Caltech, Pasadena, USA and end sequenced at Vancouver, Canada.  
Seq primer: T7  
Class: fosmid ends.

RESULT 6  
BM658677/c  
LOCUS  
DEFINITION  
BM658677 18 bp mRNA linear EST 27-FEB-2002  
L2V602768363.R1 CSEQFXL37 pig adrenal Sus scrofa cDNA, mRNA  
sequence.  
ACCESSION  
VERSION  
KEYWORDS  
BM658677.1 GI:18959848  
EST.

var. California"  
/notes="Vector: pEpifos-5 Fosmid vector"

Query Match 0.7%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 1.9;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1653 AAGAAAATAAGAGAAAAA 1672  
||| ||||| ||| |||||  
Db 20 AAAAAATAAAAAA 1

RESULT 6  
BQ797972  
LOCUS  
DEFINITION  
BQ797972 17 bp mRNA linear EST 30-JUL-2002  
vinifera cDNA clone RT092F02 3', mRNA sequence.

ACCESSION  
VERSION  
KEYWORDS  
SOURCE  
ORGANISM  
BQ797972.1 GI:22012938  
Vitis vinifera  
Vitis vinifera

REFERENCE  
AUTHORS  
TITLE  
JOURNAL  
COMMENT  
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;  
rosids; Vitaceae; Vitis.  
1 (bases 1 to 17)  
Abbal,P., Agasse,A., Ageorges,A., Atanassova,R., Barrieu,F.,  
Couture,C., Dedaldecamp,F., Delrot,S., Glissant,D., Grimpel,J.,  
Hamdi,S., Romieu,C. and Terrier,N.  
Generation of Expressed Sequence Tag from Grape Berry (skin, pulp or seeds) at Various Developmental Stages  
Unpublished (2002)  
Contact: Romieu C.  
Unite de Recherche des Produits de la Vigne  
Institut National de la Recherche Agronomique  
2, place Viala, 34 060 Montpellier Cedex 01, France  
Tel: 00-33-(0)4-99-61-28-62  
Fax: 00-33-(0)4-99-61-28-57  
Email: romieu@ensam.inra.fr

Seq primer: T7.  
Location/Qualifiers  
1. .17  
/organism="Vitis vinifera"  
/mol\_type="mRNA"  
/cultivar="Shiraz"  
/db\_xref="taxon:29760"  
/clone="RT092F02"  
/dev\_stage="ripening stage"  
/clone\_lib="ripening stage"  
/notes="Organ: Fruit; Vector: Lambda Zap II; Site 1: Eco RI; Site 2: XhoI; Oriented library, construction described in Generation of ESTs from grape Berry (skin, pulp or seeds) at various developmental stages by Terrier,N., Ageorges,A., Abbal,P., Romieu,C. in J. Plant Physiol. 158 (12): 1575-83 2001"

Query Match 0.7%; Score 14; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 3.9;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1679 GAAGCCCCATTTC 1692  
||| ||||| |||||  
Db 2 GAAGCCCCATTTC 15

RESULT 7  
BM658677/c  
LOCUS  
DEFINITION  
BM658677 18 bp mRNA linear EST 27-FEB-2002  
L2V602768363.R1 CSEQFXL37 pig adrenal Sus scrofa cDNA, mRNA  
sequence.  
ACCESSION  
VERSION  
KEYWORDS  
BM658677.1 GI:18959848  
EST.

```

SOURCE      Sus scrofa (pig)
ORGANISM    Sus scrofa
REFERENCE   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
AUTHORS     Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
TITLE       1 (bases 1 to 18)
JOURNAL     Adelson,D.L. and Gill,C.A.
COMMENT     Porcine ESTs
            Unpublished (2002)
            Contact: David L. Adelson
            Animal Breeding and Genetics
            Texas A&M University
            Animal Science Dept., TAMU-2471, College Station, TX 77843-2471,
            USA
            Tel: 9798452616
            Fax: 9798456970
            Email: david.adelson@tamu.edu.

FEATURES   Location/Qualifiers
            source
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                /organism="Sus scrofa"
                /mol_type="mRNA"
                /db_xref="taxon:9823"
                /clone_lib="CSEQRX137 pig adrenal"
                /notes="Organ: adrenal gland; Vector: pBluescript SK+;
                Site 1: NotI; Site 2: EcoRI; sequence 5' of the insert
                (5'-NNN...NNNinsert)
                GCGAATTGCAGCTCCACCGCGGTGGCGCGGCTCGAG. Sequence 3' of
                the inserts (AGCAATTCGATCAAGCTTATCGATACGTCGACCTCGAG.
                non-normalized library, sequenced 3' with M13R primer."

Query Match      0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 4;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1656 AAAAAATAGAGAAAA 1672
DB 17 AAAAAAAGAAAAA 1

RESULT 8
D11808
LOCUS      HUMHMO1H11 Liver HepG2 cell line. Homo sapiens cDNA clone hm01h11,
DEFINITION mRNA sequence.
ACCESSION  D11808
VERSION     D11808.1 GI:2155083
KEYWORDS   EST.
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1 (bases 1 to 17)
AUTHORS     Okubo,K., Hori,N., Matoba,R., Niiyama,T., Fukushima,A., Kojima,Y.
            and Matsubara,K.
TITLE       Large scale cDNA sequencing for analysis of quantitative and
            qualitative aspects of gene expression
JOURNAL     Nat. Genet. 2, 173-179 (1992)
MEDLINE    94258199
PubMed    1345164
COMMENT     Contact: Kousaku Okubo, Naohiro Hori, Ryo Matoba, Toshiyuki
            Niiyama, Atsushi Fukushima, Yuko Kojima & Kenichi Matsubara
            Institute for Molecular and Cellular Biology
            Osaka University
            1-3 Yamada-oka, Suita, Osaka 565, Japan.

FEATURES   Location/Qualifiers
            source
            1..17
                /organism="Homo sapiens"
                /mol_type="mRNA"
                /db_xref="GDB:DO88354E"
                /db_xref="taxon:9606"
                /clone="hm01h11"
                /lab_host="E.coli"
                /clone_lib="Liver HepG2 cell line."
                /notes="3'-directed regional cDNA library. Cleaved by MboI

Sus scrofa (pig)
Sus scrofa
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
1 (bases 1 to 18)
Adelson,D.L. and Gill,C.A.
Porcine ESTs
Unpublished (2002)
Contact: David L. Adelson
Animal Breeding and Genetics
Texas A&M University
Animal Science Dept., TAMU-2471, College Station, TX 77843-2471,
USA
Tel: 9798452616
Fax: 9798456970
Email: david.adelson@tamu.edu.

FEATURES   Location/Qualifiers
            source
            1..18
                /organism="Sus scrofa"
                /mol_type="mRNA"
                /db_xref="taxon:9823"
                /clone_lib="CSEQRX137 pig adrenal"
                /notes="Organ: adrenal gland; Vector: pBluescript SK+;
                Site 1: NotI; Site 2: EcoRI; sequence 5' of the insert
                (5'-NNN...NNNinsert)
                GCGAATTGCAGCTCCACCGCGGTGGCGCGGCTCGAG. Sequence 3' of
                the inserts (AGCAATTCGATCAAGCTTATCGATACGTCGACCTCGAG.
                non-normalized library, sequenced 3' with M13R primer."

Query Match      0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 4;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1656 AAAAAATAGAGAAAA 1672
DB 17 AAAAAAAGAAAAA 1

RESULT 8
D11808
LOCUS      HUMHMO1H11 Liver HepG2 cell line. Homo sapiens cDNA clone hm01h11,
DEFINITION mRNA sequence.
ACCESSION  D11808
VERSION     D11808.1 GI:2155083
KEYWORDS   EST.
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1 (bases 1 to 17)
AUTHORS     Okubo,K., Hori,N., Matoba,R., Niiyama,T., Fukushima,A., Kojima,Y.
            and Matsubara,K.
TITLE       Large scale cDNA sequencing for analysis of quantitative and
            qualitative aspects of gene expression
JOURNAL     Nat. Genet. 2, 173-179 (1992)
MEDLINE    94258199
PubMed    1345164
COMMENT     Contact: Kousaku Okubo, Naohiro Hori, Ryo Matoba, Toshiyuki
            Niiyama, Atsushi Fukushima, Yuko Kojima & Kenichi Matsubara
            Institute for Molecular and Cellular Biology
            Osaka University
            1-3 Yamada-oka, Suita, Osaka 565, Japan.

FEATURES   Location/Qualifiers
            source
            1..17
                /organism="Homo sapiens"
                /mol_type="mRNA"
                /db_xref="GDB:DO88354E"
                /db_xref="taxon:9606"
                /clone="hm01h11"
                /lab_host="E.coli"
                /clone_lib="Liver HepG2 cell line."
                /notes="3'-directed regional cDNA library. Cleaved by MboI

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```

and transformed into E.coli."

Query Match      0.6%; Score 13; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 6;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 944 GATCGACCTCAAA 956
DB 5 GATCGACCTCAAA 17

RESULT 9
CF290849
LOCUS      14ROOT--01-A17.g1 Rice root plasmid cDNA library (14ROOT) Oryza
DEFINITION sativa (japonica cultivar-group) cDNA clone 14ROOT--01-A17, mRNA
            sequence.
ACCESSION  CF290849
VERSION     CF290849.1 GI:33659882
KEYWORDS   EST.
SOURCE     Oryza sativa (japonica cultivar-group)
ORGANISM   Oryza sativa (japonica cultivar-group)
            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
            Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
            Ehrhartoideae; Oryzeae; Oryza.
REFERENCE   1 (bases 1 to 15)
AUTHORS     Kim,J.S., Jun,K.M., Cheong,P.J., Kim,M.J., Lee,T.H., Shin,Y.C.,
            Song,S.I., Kim,J.K., Kim,Y.-K. and Nahm,B.H.
            Large-scale Sequencing Analysis of Rice ESTs
            Unpublished (2003)
            Contact: Nahm B.H.
            Genomics and Genetics Institute, GreenGene Biotech Inc.; Division
            of Bioscience and Bioinformatics, Myongji University
            Yongin, Kyeonggi, Korea
            Tel: 82 31 321 6193
            Fax: 82 31 321 6355
            Email: bhnahm@bio.com, bhnahm@bio.myongji.ac.kr.

FEATURES   Location/Qualifiers
            source
            1..15
                /organism="Oryza sativa (japonica cultivar-group)"
                /mol_type="mRNA"
                /cultivar="Nackdong"
                /db_xref="taxon:39947"
                /clone="14ROOT--01-A17"
                /tissue_type="root"
                /dev_stage="14 days after germination"
                /lab_host="E.coli DH10B"
                /clone_lib="Rice root plasmid cDNA library (14ROOT)"
                /note="Vector: PCR4-TOPO; Site 1: EcoRI; mRNA was capped
                with oligoribonucleotides and then used as templates for
                RT-PCR."

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Best Local Similarity 86.7%; Pred. No. 11;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1656 AAAAAATAGAGAAA 1670
DB 1 AAAAAATAGAGAAA 15

RESULT 10
CF324208/c
LOCUS      HDN--05-O18.g1 OSHDAC1-overexpressing transgenic rice lambda phage
DEFINITION cDNA library II (HDN) Oryza sativa (japonica cultivar-group) cDNA
            clone HDN--05-O18, mRNA sequence.
ACCESSION  CF324208
VERSION     CF324208.1 GI:33796681
KEYWORDS   EST.
SOURCE     Oryza sativa (japonica cultivar-group)
ORGANISM   Oryza sativa (japonica cultivar-group)
            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

```

Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Ehrhartoideae; Oryzeae; Oryza.

REFERENCE  
AUTHORS Kim, J. S., Jun, K. M., Cheong, P. J., Kim, M. J., Lee, T. H., Shin, Y. C., Song, S. I., Kim, J. K., Kim, Y. -K. and Nahm, B. H.

TITLE Large-scale Sequencing Analysis of Rice ESTs

JOURNAL Unpublished (2003)

COMMENT Contact: Nahm B.H.  
Genomics and Genetics Institute, GreenGene Biotech Inc.; Division of Bioscience and Bioinformatics, Myongji University  
Yongin, Kyeonggi, Korea  
Tel: 82 31 330 6193  
Fax: 82 31 321 6355  
Email: bnhnm@gbio.com, bnhnm@bio.myongji.ac.kr.

## FEATURES

source

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Location/Qualifiers
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/clone="HDN--05-018"
/tissue_type="callus"
/dev_stage="proliferated callus on 2N6 media for 2 weeks"
/lab_host="E.coli SOLR"
/clone_lib="OSHDA1-overexpressing transgenic rice lambda
phage cDNA library II (HDN)"
/notes="Vector: pBluescript SK(+); Site 1: EcoRI; Site 2:
XhoI; cDNA was inserted into lambda Uni-ZAP XR vector at
5' end with EcoRI and 3' end with XhoI site. mRNA was
derived from rice Histone Deacetylase overexpression
line."
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Query Match 0.6%; Score 11.4; DB 1; Length 15;  
Best Local Similarity 92.3%; Pred. No. 13;  
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1509 TGGTAACCTTGT 1521

Db 15 TGGTAACCTTGT 3

## RESULT 11

AJ592951/c

LOCUS Arabidopsis thaliana T-DNA flanking sequence, left border, clone  
DEFINITION 372C12, genomic survey sequence.

ACCESSION AJ592951

VERSION AJ592951.1 GI:37942575

KEYWORDS GSS; left border; T-DNA flanking sequence.

SOURCE Arabidopsis thaliana (thale cress)

ORGANISM Arabidopsis thaliana

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;  
rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.

## REFERENCE

AUTHORS

Brunaud, V., Balzerque, S., Dubreucq, B., Aubourg, S., Samson, F.,  
Chauvin, S., Bechtold, N., Cruaud, C., DeRose, R., Pelletier, G.,  
Lepiniec, L., Caboche, M. and Lecharny, A.

TITLE T-DNA integration into the Arabidopsis genome depends on sequences  
of pre-insertion sites

JOURNAL EMBO Rep. 3 (12), 1152-1157 (2002)

MEDLINE 22363535

PUBMED 12446565

REFERENCE 2 (bases 1 to 15)

AUTHORS Balzerque, S.

TITLE Direct Submission

JOURNAL Submitted (23-OCT-2003) Balzerque S., UMRGV, INRA/CNRS, 2 rue

Gaston Cremieux, 91057 Evry cedex, FRANCE

COMMENT PCR was performed on DNA from transformants of Arabidopsis thaliana  
plants from INRA (Versailles). The DNA fragment(s) resulting from  
the PCR were directly sequenced from the left or the right border  
to determine the genomic sequence flanking the insertion. T-DNA  
derived sequences were removed. Information to order the

corresponding mutant line and a link to a database providing a  
graphical display of the insertion site are available at  
http://dbsgap.versailles.inra.fr/publiclines/. This sequence has  
been generated in the framework of the French plant genomics  
program 'Genoplante' (http://www.genoplante.com and  
http://genoplante-info.infobiogen.fr).

## FEATURES

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/mol_type="genomic DNA"
/cultivar="Wassillewskija"
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/clone="372C12"
/clone_lib="Arabidopsis thaliana T-DNA insertion lines"
misc_feature 1. .15
/notes="T-DNA flanking sequence
left border"
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Query Match 0.6%; Score 11.4; DB 1; Length 15;  
Best Local Similarity 92.3%; Pred. No. 13;  
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1647 CCGGGAAGGAAA 1659

Db 13 CCGGGAAGGAAA 1

## RESULT 12

AJ592952/c

LOCUS Arabidopsis thaliana T-DNA flanking sequence, left border, clone  
DEFINITION 372D01, genomic survey sequence.

ACCESSION AJ592952

VERSION AJ592952.1 GI:37942576

KEYWORDS GSS; left border; T-DNA flanking sequence.

SOURCE Arabidopsis thaliana (thale cress)

ORGANISM Arabidopsis thaliana

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;  
rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.

## REFERENCE

AUTHORS

Brunaud, V., Balzerque, S., Dubreucq, B., Aubourg, S., Samson, F.,  
Chauvin, S., Bechtold, N., Cruaud, C., DeRose, R., Pelletier, G.,  
Lepiniec, L., Caboche, M. and Lecharny, A.

TITLE T-DNA integration into the Arabidopsis genome depends on sequences  
of pre-insertion sites

JOURNAL EMBO Rep. 3 (12), 1152-1157 (2002)

MEDLINE 22363535

PUBMED 12446565

REFERENCE 2 (bases 1 to 15)

AUTHORS Balzerque, S.

TITLE Direct Submission

JOURNAL Submitted (23-OCT-2003) Balzerque S., UMRGV, INRA/CNRS, 2 rue

Gaston Cremieux, 91057 Evry cedex, FRANCE  
PCR was performed on DNA from transformants of Arabidopsis thaliana  
plants from INRA (Versailles). The DNA fragment(s) resulting from  
the PCR were directly sequenced from the left or the right border  
to determine the genomic sequence flanking the insertion. T-DNA  
derived sequences were removed. Information to order the

corresponding mutant line and a link to a database providing a  
graphical display of the insertion site are available at  
http://dbsgap.versailles.inra.fr/publiclines/. This sequence has  
been generated in the framework of the French plant genomics  
program 'Genoplante' (http://www.genoplante.com and  
http://genoplante-info.infobiogen.fr).

## FEATURES

source

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1. .15
Location/Qualifiers
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/mol_type="genomic DNA"
/cultivar="Wassillewskija"
/db_xref="taxon:3702"
/clone="372D01"
/clone_lib="Arabidopsis thaliana T-DNA insertion lines"
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              /note="T-DNA flanking sequence
              left border"

Query Match      0.6%  Score 11.4; DB 1; Length 15;
Best Local Similarity 92.3%; Pred. NO. 13;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1647 CCGGGAAGAAAA 1659
      |||||
Db 13 CCGGGAAGAAAA 1

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